Fundamentals of IT

Computer: An electronic machine that can store, find and arrange information, calculate amounts and control other machines. A computer is a machine or device that performs processes, calculations and operations based on instructions provided by a software or hardware program. It has the ability to accept data (input), process it, and then produce outputs.

Computers can also store data for later uses in appropriate storage devices, and retrieve whenever it is necessary.

Modern computers are electronic devices used for a variety of purposes ranging from browsing the web, writing documents, editing videos, creating applications, playing video games, etc.

Basic History of Computer

The word 'computer' has a very interesting origin. It was first used in the 16th century for a person who used to compute, i.e. do calculations. The word was used in the same sense as a noun until the 20th century. Women were hired as human computers to carry out all forms of calculations and computations.

By the last part of the 19th century, the word was also used to describe machines that did calculations. The modern-day use of the word is generally to describe programmable digital devices that run on electricity.

Since the evolution of humans, devices have been used for calculations for thousands of years. One of the earliest and most well-known devices was an abacus. Then in 1822, the father of computers, Charles Babbage began developing what would be the first mechanical computer. And then in 1833 he actually designed an Analytical Engine which was a general-purpose computer. It contained an ALU, some basic flow chart principles and the concept of integrated memory.

Then more than a century later in the history of computers, we got our first electronic computer for general purpose. It was the ENIAC, which stands for Electronic Numerical Integrator and Computer. The inventors of this computer were John W. Mauchly and J. Presper Eckert.

And with times the technology developed and the computers got smaller and the processing got faster. We got our first laptop in 1981 and it was introduced by Adam Osborne and EPSON.

Generations of Computers

In the history of computers, we often refer to the advancements of modern computers as the generation of computers. We are currently on the fifth generation of computers. So let us look at the important features of these five generations of computers.

- **1st Generation:** This was from the period of 1940 to 1955. This was when machine language was developed for the use of computers. They used vacuum tubes for the circuitry. For the purpose of memory, they used magnetic drums. These machines were complicated, large, and expensive. They were mostly reliant on batch operating systems and punch cards. As output and input devices, magnetic tape and paper tape were implemented. For example, ENIAC, UNIVAC-1, EDVAC, and so on.

- **2nd Generation:** The years 1957-1963 were referred to as the "second generation of computers" at the time. In second-generation computers, COBOL and FORTRAN are employed as assembly languages and programming languages. Here they advanced from vacuum tubes to transistors. This made the computers smaller, faster and more energy-efficient. And they advanced from binary to assembly languages. For instance, IBM 1620, IBM 7094, CDC 1604, CDC 3600, and so forth.

- **3rd Generation:** The hallmark of this period (1964-1971) was the development of the integrated circuit. A single integrated circuit (IC) is made up of many transistors, which increases the power of a computer while simultaneously lowering its cost. These computers were quicker, smaller, more reliable, and less expensive than their predecessors. High-level programming languages such as FORTRON-II to IV, COBOL, and PASCAL PL/1 were utilized. For example, the IBM-360 series, the Honeywell-6000 series, and the IBM-370/168.

- **4th Generation:** The invention of the microprocessors brought along the fourth generation of computers. The years 1971-1980 were dominated by fourth generation computers. C, C++ and Java were the programming languages utilized in this generation of computers. For instance, the STAR 1000, PDP 11, CRAY-1, CRAY-X-MP, and Apple II. This was when we started producing computers for home use.

- **5th Generation:** These computers have been utilized since 1980 and continue to be used now. This is the present and the future of the computer world. The defining aspect of this generation is artificial intelligence. The use of parallel processing and superconductors are making this a reality and provide a lot of scope for the future. Fifth-generation computers use ULSI (Ultra Large Scale Integration) technology. These are the most recent and sophisticated computers. C, C++, Java,.Net, and more programming languages are used. For instance, IBM, Pentium, Desktop, Laptop, Notebook, Ultrabook, and so on.

Block Diagram of Computer:
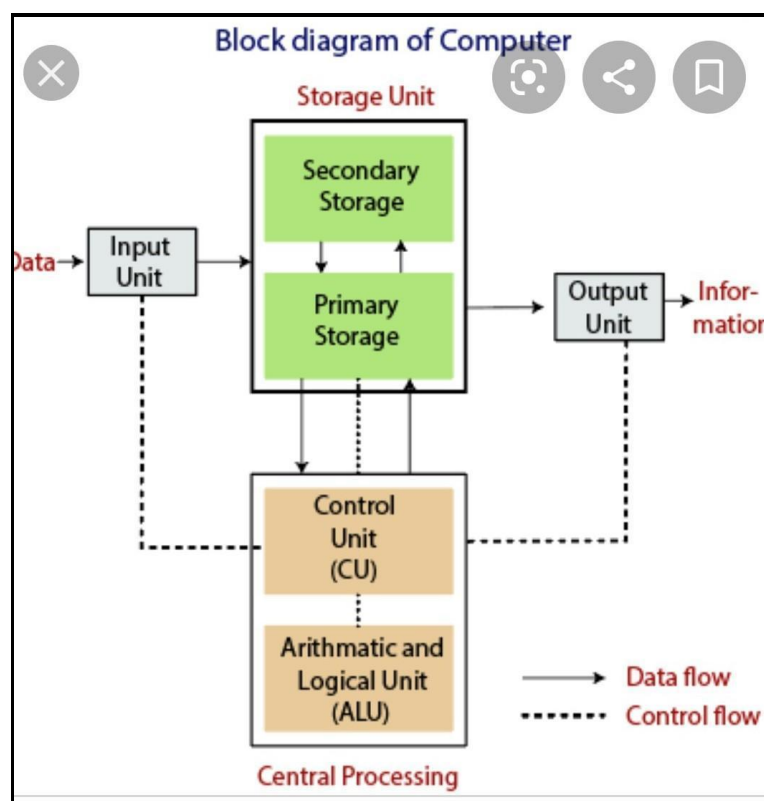
Input: All the data received by the computer goes through the input unit. The input unit comprises different devices like a mouse, keyboard, scanner, etc. In other words, each of these devices acts as a mediator between the users and the computer.

CPU – Central Processing Unit: Central Processing Unit or the CPU, is the brain of the computer. It works the same way a human brain works. As the brain controls all human activities, similarly the CPU controls all the tasks.

Moreover, the CPU conducts all the arithmetical and logical operations in the computer.

Now the CPU comprises of two units, namely – ALU (Arithmetic Logic Unit) and CU (Control Unit). Both of these units work in sync. The CPU processes the data as a whole.

ALU – Arithmetic Logic Unit

The Arithmetic Logic Unit is made of two terms, arithmetic and logic. There are two primary functions that this unit performs.

Data is inserted through the input unit into the primary memory. Performs the basic arithmetical operation on it. Like addition, subtraction, multiplication, and division. It performs all sorts of calculations required on the data. Then sends back data to the storage.

The unit is also responsible for performing logical operations like AND, OR, Equal to, Less than, etc. In addition to this it conducts merging, sorting, and selection of the given data.

CU – Control Unit: The control unit as the name suggests is the controller of all the activities/tasks and operations. All this is performed inside the computer.

Memory Unit: All the data that has to be processed or has been processed is stored in the memory unit. The memory unit acts as a hub of all the data. It transmits it to the required part of the computer whenever necessary.

The memory unit works in sync with the CPU. This helps in faster accessing and processing of the data. Thus, making tasks easier and quicker.

Primary memory – This type of memory cannot store a vast amount of data. Therefore, it is only used to store recent data. The data stored in this is temporary. It can get erased once the power is switched off. Therefore, is also called temporary memory or main memory.

RAM stands for Random Access Memory. It is an example of primary memory. This memory is directly accessible by the CPU. It is used for reading and writing purposes. For data to be processed, it has to be first transferred to the RAM and then to the CPU.

Secondary memory – As explained above, the primary memory stores temporary data. Thus it cannot be accessed in the future. For permanent storage purposes, secondary memory is

used. It is also called permanent memory or auxiliary memory. The hard disk is an example of secondary memory. Even in a power failure data does not get erased easily.

Output: There is nothing to be amazed by what the output unit is used for. All the information sent to the computer once processed is received by the user through the output unit. Devices like printers, monitors, projectors, etc. all come under the output unit.

The output unit displays the data either in the form of a soft copy or a hard copy. The printer is for the hard copy. The monitor is for the display. The output unit accepts the data in binary form from the computer. It then converts it into a readable form for the user.

Storage Device

A **storage device** is a piece of computer hardware used for saving, carrying, and pulling out data. It can keep and retain information short-term or long-term. It can be a device inside or outside a computer or server. Other terms for the storage device are storage medium or storage media.

A storage device is one of the basic elements of any computer device. It almost saves all data and applications in a computer except for hardware firmware. It comes in different shapes and sizes depending on the needs and functionalities.

Types of Storage Devices

There are two different types of storage devices:

	Primary Storage Device	Secondary Storage Device
Size	Smaller	Larger
Data Retention	Temporary	Permanent
Location	Internal	Internal / External
Examples	RAM, Cache Memory	Hard disk, Compact Disk Drive, USB storage device

List of Storage Devices

This is the list of devices in order of their capacity, starting from the lowest ones.

1. Punch card

2. Floppy diskette
3. Zip disk
4. CD
5. DVD
6. Blu-ray disc
7. Flash jump drive
8. Hard drive / SSD
9. Tape drives
10. NAS / Cloud Storage

Cache Memory

Cache Memory is a special very high-speed memory. The cache is a smaller and faster memory that stores copies of the data from frequently used main memory locations. There are various different independent caches in a CPU, which store instructions and data. The most important use of cache memory is that it is used to reduce the average time to access data from the main memory.

Characteristics of Cache Memory

- Cache memory is an extremely fast memory type that acts as a buffer between RAM and the CPU.
- Cache Memory holds frequently requested data and instructions so that they are immediately available to the CPU when needed.
- Cache memory is costlier than main memory or disk memory but more economical than CPU registers.
- Cache Memory is used to speed up and synchronize with a high-speed CPU.

Booting: In computing, booting is the process of starting a computer as initiated via hardware such as a button or by a software command. After it is switched on, a computer's central processing unit (CPU) has no software in its main memory, so some process must load software into memory before it can be executed. This may be done by hardware or firmware in the CPU, or by a separate processor in the computer system.

1. Cold Booting or Soft Booting: Cold Booting is a process when the user starts their computer normally like switching on from the power socket and hitting the power button of the CPU [Central Processing Unit].

This is the initial process to start the computer without pressing any keys from keyboards or playing with the mouse.

2. Warm Booting or Hard Booting: Warm booting or hard booting is a process where the user deliberately restarts the computer system when the system freezes or hangs or stops responding to instructions and commands given to them.

This usually happens to computer systems and we are required to restart our system by pressing the reset button on the CPU or by pressing the CTRL+ALT+DEL combination keys from the keyboard.

Units of Memory:

Bit	A bit can hold only one of two values: 0 or 1
Nibble	Four consecutive binary digits or half of an 8-bit byte.
Byte	The byte is a unit of digital information that most commonly consists of eight bits.
Kilo (Kilobyte, KB)	1,024 Bytes
Mega (Megabyte, MB)	1,024 Kilobytes
Giga (Gigabyte, GB)	1,024 Megabytes
Tera (Terabyte, TB)	1,024 Gigabytes
Peta (Petabyte, PB)	1,024 Terabytes

Functions of Memory: Our memory has three basic functions: encoding, storing, and retrieving information. Encoding is the act of getting information into our memory system through automatic or effortful processing. Storage is retention of the information, and retrieval is the act of getting information out of storage and into conscious awareness through recall, recognition, and relearning. Finally, retrieval is the act of getting memories out of storage and back into conscious awareness.

Browser: A browser is an application program that provides a way to look at and interact with all the information on the World Wide Web. This includes Web pages, videos and images. Many people will use web browsers today for access to the internet and is seen almost as a necessity in how many navigate their daily life.

WWW: World Wide Web (WWW), byname the Web, the leading information retrieval service of the Internet (the worldwide computer network). The Web gives users access to a vast array of mass media and content.

The World Wide Web (WWW), commonly known as the Web, is an information system enabling information to be shared over the Internet through simplified ways meant to appeal to users beyond IT specialists and hobbyists, as well as documents and other web resources to be accessed over the Internet according to specific rules, the Hypertext Transfer Protocol (HTTP).

Email: Electronic mail is way of sending electronic messages or data from one computer to another.

Advantages of Email:

1. Email is a free tool. Once you are online, there is no further expense that you need to spend on in order to send and receive messages.

2. Email is quick. Once you have finished composing a message, sending it is as simple as clicking a button. Email, especially if an email system is integrated into the network, is sent, delivered, and read almost immediately.

3. Email is simple. It is easy to use. Once your account is set up, composing, sending, and receiving messages is simple. Also, email allows for the easy and quick access of information and contacts.

4. Email allows for easy referencing. Messages that have been sent and received can be stored and searched through safely and easily. It is a lot easier to go through old email messages rather than old notes written on paper.

5. Email is accessible from anywhere – as long as you have an internet connection. Whether or not you are in the office or on the field, or even overseas, you can access your inbox and go through your messages.

6. Email is paperless and therefore, beneficial for the planet. Not only can you reduce the costs of paper, you are actually reducing the damage paper usage does to the environment.

7. Email allows for the mass sending of messages. An effective medium to utilize to get your message out there, you can send one particular message to several recipients all at once.

8. Email allows for instant access to information and files. You can opt to send yourself files and keep messages so that you have a paper trail of conversations and interactions you have online, just in case you may need them in the future.

Various Email Service Providers:

Gmail

Rediffmail

Outlook

AOL Mail

Yahoo Mail

Titan

iCloud Mail

Proton Mail

Zoho Mail

Yandex Mail

GMX Mail

Hubspot

Creation of Email ID: 1. From your Internet browser, navigate to the sign-up page for your email provider.

Once again, you can use a trusted provider such as Gmail (from Google), Yahoo! Mail or Outlook (from Microsoft).

2. Enter your details to open an email account. These often include:

Name	First and last
Desired	This is the email address you'd like to create. Choose a login name that is easy

Login Name	for you to remember, spell and type. Once your create this, you can't change it. Many people will use their name separated by a dot, such as firstname.lastname@gmail.com, as this is recognizable and easy for others to email you.
Password	Create a password that is secure, which is often not easy to remember, spell or share. Use at least eight characters with a combination of upper case, lower case, letters, numbers and symbols. For example, a password such as "password999" is easy for a person or automated bot to guess. But a password such as "a3#b975!d" is much harder. Write this password down and store that in a safe place.
Phone number	This can be used as an extra security measure in case you can't get into your email account in the future.

3. Follow the rest of the steps as required.

Some sign-up forms will also ask for things such as your birthday and location. You may also be asked to create a security question, which can be a helpful way for you to recover a forgotten password.

4. Accept the "Terms of Service."

You'll also be asked to read and accept the terms of their service. This is usually one of the final steps.

5. Start using your new email account!

You can easily log in from any computer, phone or tablet that has Internet access.

Usage of Gmail: 1. It connects with other platforms: Google was created in 1998 and since then has been expanding its long list of online products including; Drive, Maps, Hangouts and Photos. What's great is that they all sit under one roof and integrate perfectly with each other. On top of this Gmail can integrate with over 4,000 3rd party apps.

2. You can use it almost everywhere!

Due to its massive amount of users, most apps, browsers, smartphones, tablets and computers make Gmail easily accessible. So you're never too far away from checking your inbox!

3. **It stops unwanted emails**

   Gmail has a strong prevention of Malware and Phishing and blocks a massive 10 million unwanted **spam** per minute, they warn you if an email looks dodgy and even prevent you from clicking on it.

4. **Personalization**

The platform allows you to personalize and organize your inbox with rules and filters and you can even snooze the less urgent emails.

5. **Constant innovation**

   Gmail often adds new features, making the experience even better.

6. **It's Free**

Digital Marketing: Digital marketing, also called online marketing, is the promotion of brands to connect with potential customers using the internet and other forms of digital communication. This includes not only email, social media, and web-based advertising, but also text and multimedia messages as a marketing channel.

1. **Characteristics of Digital Marketing: Data-driven**: Digital marketing relies heavily on data analysis and tracking to measure the effectiveness of campaigns and make informed decisions about strategy. This includes tracking website traffic, engagement on social media, and conversions from online ads.

2. **Targeted**: Digital marketing allows for highly targeted advertising by utilizing data such as demographics, browsing behaviour, and search history to reach specific audiences.

3. **Measurable**: One of the major advantages of digital marketing is its ability to be easily measured and tracked. This allows marketers to see exactly how their campaigns are performing and make adjustments in real time.

4. **Interactive**: Digital marketing allows for two-way communication between brands and consumers. This includes features such as social media comments, chatbots, and interactive content such as quizzes and polls. This interactive aspect can help increase engagement and build stronger relationships with customers.

5. **Omnichannel**: Digital marketing encompasses a variety of channels, including search engines, social media, email, and mobile apps. An effective digital marketing strategy will utilize a mix of these channels to reach customers where they are and on the devices

they use. This can include search engine optimization, social media advertising, email marketing, and mobile app development.

6. **Cost-effective**: Digital marketing is often more cost effective than traditional marketing methods, as it allows for reaching a large audience at a lower cost. Additionally, digital marketing campaigns can be easily scaled up or down depending on the budget.

7. **Personalization**: Digital marketing allows for the personalization of the marketing message and content, which can increase the effectiveness of the campaign by making it more relevant to the target audience.

8. **Automation**: Many digital marketing tasks can be automated, such as email campaigns, social media posts, and ad targeting. This allows for more efficient use of resources and the ability to scale campaigns more effectively.

9. **Real-time**: Digital marketing campaigns can be launched and adjusted in real time, which allows for quick responses to changes in the market or customer feedback.

10. **Continuous**: Unlike traditional marketing, digital marketing campaigns can be continuous and ongoing, allowing for more sustained engagement with the target audience. Additionally, digital marketing campaigns can be continuously tweaked and improved to ensure they remain effective over time.

Tools of Digital Marketing: **1. Social Media:** This is the most powerful one, as we all know that Social media is the collection of communication, interactions, and collaboration. Apps and Websites will dedicate the social networking blogging, and many more are there. This technique supports understanding your brand and content on your social media channels; it will drive traffic and generate directions for your company.

2. SEO: SEO stands for Search Engine Optimization. Seo is a technique to get traffic for the website. This is one of the best parts of Digital marketing tools. From this, you can drive more traffic to the sites. This is how to "rank" your website in search engine scores, thereby improving the percentage of organic traffic. The organization uses the SEO technique to grow their business over the world wide Web.

3. Affiliate Marketing: Affiliate marketing has become one of the oldest ways of digital marketing tools where you refer somebody to an online product. If that person buys that product, you will get a commission based on that recommendation. The advertisements in affiliate programs are connected to companies' websites and are referred to as affiliate links. Affiliates usually have to apply for affiliate programs, while most affiliate programs have no price to join. Affiliates decide which banners or advertisements they will place on their websites within their affiliate programs. They will also agree to membership programs with

the highest Commission structure for merchants, although the structure is not usually considered very paying or beneficial.

4. PPC: PPC means Pay Per Click. In this model of marketing, the owner pays money per click. The most important PPC ad format appears on the search results pages of search engines like Google or Bing. Most, but not all, PPC ads appear in the search results.

5. Landing Page Tools: Lead-pages: This Leadpages tool will help to make a user-friendly landing page. It will offer lead magnets, collect email addresses, and integrate your email automation software with your pages.

Click-Funnels: You don't need a hosting platform, a domain name, a high-end theme, a coding developer, email automation software, or any other technical expertise to make a shopping funnel. Click-Funnels create the levels of Landing pages to collect the Email address; Product sells, and many more.

7. Visual Design Tools: Canva: It will help you to design a beautiful image with the help of Drag and drop option. Please choose one of their countless templates or a pre-sized blank design for your chosen platform. Even the branding section can be customized, so you always have your choice of colors, fonts, and logos on your platform.

Animoto: From this, you can create a professional video, GIF, Custom Text Visual effect, and many more things you make from this Animoto.

Why digital marketing is important for business or Needs of Digital Marketing:

Good for brand growth and awareness: Digital marketing levels the playing field and allows you to compete with bigger brands in your sector that otherwise wouldn't be achievable.

The internet is home to a huge source of potential customers, so by marketing your brand using the above techniques we discussed, you're able to target a lot more people than you would normally.

Using these different digital marketing channels, your brand will grow and become more widely recognised, helping to raise awareness about what you do and the products or services you sell.

Targets online customers: As of January 2023, there were 5.16 billion internet users worldwide, which means there are quite literally billions of people out there that may be interested in your brand.

Your customers are online waiting to discover your brand and a good digital marketing strategy will be able to tap into this potential. The more exposure your brand receives, the more likely you'll attract new customers.

The majority of people now use the internet to find out about businesses, so you'd be crazy to not have an online presence and be involved in the conversation. If people can't find your business online, then the chances are that they'll choose a competitor and you'll lose a potential customer.

Affordable: Digital marketing is a lot more cost-effective than traditional marketing methods, which is ideal for businesses that have limited funds and resources. You also have complete control over how you spend your money, targeting certain marketing streams depending on your needs. For example, using Google Ads or commissioning some time with a videographer.

It also allows you to be flexible with your money, pivoting to different marketing strategies when required. This reduces the risk of wasting precious finances and ensures money gets allocated effectively.

Measurable: Another great reason why digital marketing is important and superior to traditional marketing tools is that it's measurable. With digital marketing, you'll have access to a huge source of data and metrics, whether that's impressions, views, time on a page, click rate, and so on. This means you can see accurate data in real-time.

Faster and more efficient

Implementing digital marketing strategies can also be a lot quicker and more efficient, as you'll be able to start the process immediately.

Good return on investment: Digital marketing allows you to track day-to-day campaign performance, ensuring you know what channels are performing and which are struggling. This helps you to optimise campaign budgets for high return on investment (ROI).

Reaches out to mobile users: There are approximately 6.84 billion smartphones in the world, with 4.76 billion people using social media globally. A well-crafted digital marketing strategy is your best chance of reaching this massive audience and failure to do so will mean you're missing out on a huge amount of customer potential.

Allows you to stand out from your competitors: Trust us when we say that your competitors are already using effective digital marketing tools to further their business. So, if you're not doing it yet, then it's essential that you make a start now.

Social Media: Social media refers to the means of interactions among people in which they create, share, and/or exchange information and ideas in virtual communities and networks. The Office of Communications and Marketing manages the main Facebook, Twitter, Instagram, LinkedIn and YouTube accounts.

Features of Social Media: 1. Provide free web space: Members of these sites don't need to own or share web servers. They can publish their content on the free space provided by these sites.

2. Provide free web address: Members are allotted a unique web address that becomes the web identity of an individual or a business. It can be used to identify, connect and share content.

3. Ask members to build profiles: These sites require members to build their profiles. Information entered in the profiles is used to connect friends and contacts, and build networks that connect people with similar likes and interests across the world.

4. Encourage members to upload content: These sites allow members to upload text messages, photographs, audio and video files. All posts are published in in descending order with the last post coming first. Most important, all content is published in real time, and can be read, viewed or shared instantly.

5. Allow members to build conversations: Members can browse content and comment upon it. By doing so, social media sites allow members to engage in conversations that increase engagement.

6. Allow live chats: Several social media sites have chat clients that enable members to chat with each other in real time.

7. Direct Messaging facility: Several social media sites provide direct messaging facility to their members. This allows members to send private messages, which can be read or viewed only by those for whom the message is intended.

8. Provide tagging alerts: Most social media sites alert members through e-mail or in site notifications whenever they are tagged in a message or in a photograph.

9. Enable members to create unique pages: On some social media sites, members can create theme-based pages. The pages can then be used to post articles or photographs related to a theme. The pages can also be used to promote businesses.

Advantages of social media: The advantages of social media are numerous and varied. Here are some of the most common:

1. Useful for educational purposes:

Social media allows you to reach a large audience and build your brand. You can share relevant information or content with this audience, which is helpful if you want people to follow you on social media. This can help promote your business or product, which will help you increase sales.

2. Build your brand:

Social media helps you build your brand by interacting with others and sharing interesting facts about yourself. Sharing content on social media can help you gain followers who will then be interested in what you have to say. It also helps build trust between the viewer and the content creator because they already know them because of their interactions on social media platforms such as Twitter or Facebook.

3. Reach a large audience:

Social media allows users to easily connect and share information with their friends or followers. Millions of people use social media every day, making it easier for businesses like yours to find potential customers online. Due to its ability to communicate directly with customers, social media has become an essential tool for businesses worldwide. It allows them to engage with customers without being physically present, such as in stores. When someone sees something interesting posted by someone else, they might want.

4. Target audiences based on their interests.

When choosing who should receive marketing messages via social media, it's essential not just to reach out indiscriminately but also to target those who would be most likely interested in what you have to offer—this will increase their likelihood of responding. For example, suppose you're a photographer and want to target businesses that could use your services. In that case, you might send them a message about the different types of photography available and what they can do for each business type (e.g., commercial photography for companies or portraits for individuals).

5. Stay up to date.

You can stay in touch with what's happening in your industry or world by following people on social media who are doing things you want to be doing. You can spend time following

brands and companies that interest you and find out about new products and services they're offering so that you can learn from them.

6. Get connected to new people.

When you use social media, you connect to people who share your interests and values. This can help build relationships, which may lead to business opportunities later on down the road.

7. Create your audiences.

If you're not using social media for business purposes, it may still be worth it for other reasons, like building an audience of people who like what you offer! Having a significant online following means there's a good chance that someone will see what you post and contact you about it later, which could lead to more opportunities for both sides.

8. Free to use.

Social media is free! No fees or subscriptions are involved as long as you have an established account with some provider (like Facebook). If not, some costs might be associated with getting started or maintaining it (like paying a monthly fee). Still, these are usually very low and affordable if you're willing to do some research.

9. Builds relationships.

In addition to meeting new people through social media, you can also reconnect with old friends. It's also a great way to keep in touch with people who may not live close by anymore but still want to stay connected somehow.

10. Get new visitors to website:

Through social media, we may increase visitors to our website and gain a lot of conversions, which results in sales if there is high engagement and a large audience.

Disadvantages of Social Media: Social media has become essential to our lives, especially for kids. This is because it provides a platform to learn new things and interact with people worldwide. However, there are some downsides as well. Here are some disadvantages of social media:

1. Spending a lot of time on social media.

Social media is addictive and can consume your time if you don't have any other interests. It would help if you kept up with your studies and hobbies to stay productive.

2. Decrease in Communication skills.

Social media makes us more self-centered and less empathetic towards others. It also makes us more narcissistic than ever because we can show off our achievements and post photos from parties without facing any consequences.

3. Fake news.

Fake news stories have been making headlines lately due to their viral nature; these stories often spread like wildfire among young people who lack critical thinking skills or experience with reading between the lines regarding online content.

4. Social media can cause sleeplessness

Studies show that when people spend too much time on social media, they have trouble getting to sleep, leading to insomnia and other sleep disorders.

5. Content on social media is not appropriate for children.

While some parents monitor their kids' social media accounts, most don't have access to them. And if they do, they're not going to be keeping an eye on every single post and saying, "that's inappropriate." This can lead to some pretty dangerous situations!

6. Cyber attacks are becoming more prevalent in today's world.

It will help if you protect yourself from these threats by using passwords that are difficult to guess (like capital letters or numbers), changing passwords regularly, and staying away from public Wi-Fi hotspots wherever possible.

7. Lack of Confidence.

People who are not confident in their skills may feel inferior when they post something on social media, which can lead to low self-esteem and depression.

8. Fear of missing out (FOMO).

People constantly checking their phones for new messages or updates may become anxious if they do not see anything promptly. This can lead to stress and anxiety if people use social media excessively.

9. No privacy:

There is no privacy on social media as it is public by nature. Anyone can access the content posted on social media without prior notice or permission from the user who originally posted it.

10. Getting close to Depression

Getting close to depression is another potential side effect of spending too much time on social media sites like Facebook or Instagram (see point above). Getting too caught up in one's own life can lead many people into depression! One way to prevent this is by opening up channels with others who are also using social media sites. Sharing your experiences with others going through similar struggles is possible by joining a Facebook or Instagram group.

Programming: Programming refers to a technological process for telling a computer which tasks to perform in order to solve problems. You can think of programming as a collaboration

between humans and computers, in which humans create instructions for a computer to follow (code) in a language computer can understand.

Algorithm: In Computer Science, an algorithm is a list set of instructions, used to solve problems or perform tasks, based on the understanding of available alternatives. Simply put, an algorithm is a set of instructions that performs a particular action.

The word Algorithm means " A set of finite rules or instructions to be followed in calculations or other problem-solving operations "

Flowchart: A flowchart is a diagram that shows an overview of a program. Flowcharts normally use standard symbols to represent the different types of instructions. These symbols are used to construct the flowchart and show the step-by-step solution to the problem. Flowcharts are sometimes known as flow diagrams.

A flowchart is a type of diagram that represents a workflow or process. A flowchart can also be defined as a diagrammatic representation of an algorithm, a step-by-step approach to solving a task.