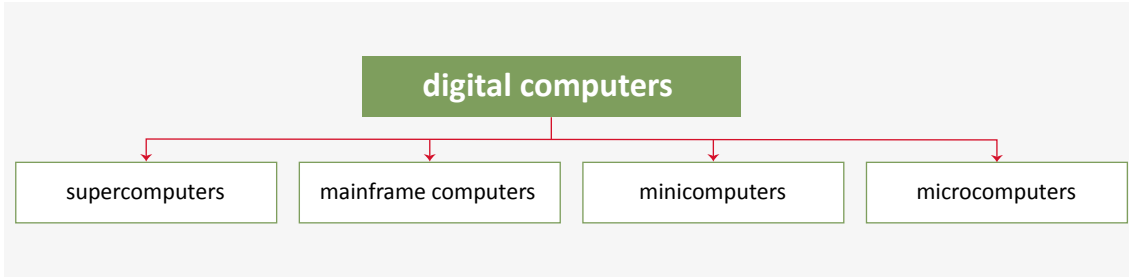# Types of computers

With advancement in technology, computers are available in different sizes, shapes and designs. Their specifications are also getting more advanced day by day.

Depending on their processing power and size, computers can be classified under various types.

digital computers

| supercomputers | mainframe computers | minicomputers | microcomputers |

Calculation-intensive tasks can be effectively performed by means of supercomputers. Quantum physics, mechanics, weather forecasting and molecular theory, for instance, are best studied by means of supercomputers.

Mainframe computers are high-performance computers used for large-scale computing purposes. Today, mainframe computers play a central role in the daily operations of most of the world's largest corporations.[1] Most of the mainframe computers have the capacity to host[2] multiple operating systems and operate as a number of virtual machines. For example, a banking institution could use a mainframe to host the database of its customers' accounts, for which transactions can be submitted from any of thousands of ATM[3] locations worldwide.

In terms of size and processing capacity, minicomputers lie in between mainframes and microcomputers. Minicomputers are also called mid-range systems or workstations.

A microcomputer is a computer with a microprocessor as its central processing unit. Microcomputers are physically small compared to mainframe and minicomputers. When supplemented with a keyboard and a mouse, microcomputers can be called personal computers. A monitor, a keyboard and other similar input-output devices, computer memory in the form of RAM and a power supply unit come packaged in a microcomputer.

IBM first promoted the term personal computer to differentiate this type of computer from other microcomputers, often called home computers, and from IBM's own mainframes and minicomputers. Personal computers come in a variety of forms such as desktops, laptops and personal digital assistants. A desktop is intended to be used at a single location. Power consumption is not as critical[4] as that in laptops. Desktops are widely popular for daily use in workplaces and households.

Laptops run on a single battery or an external adapter that charges the computer batteries. They are provided with an inbuilt keyboard, a touch pad acting as a mouse and a liquid crystal display.

Netbooks are ultra-portable computers that are even smaller than traditional laptops.

Personal digital assistants (PDAs) are handheld computers, popularly known as palmtops. They have a touch screen and a memory card for data storage. PDAs can also be effectively used as portable audio players, web browsers and smartphones. Most of them can access the internet by means of Wi-Fi communication. Tablets are another popular type of microcomputers.

GLOSSARY

1 business organizations
2 to contain
3 Automated Teller Machine, also known as a cash machine. It refers to a computerized device that provides the clients of a bank with access to financial transactions in a public space without the need for a cashier
4 high

ACTIVITIES

1 *Match each computer type with its definition.*

1	Mainframe computers	A	They are ultra-portable computers.
2	Microcomputers	B	They are used to study quantum physics and for weather forecasting.
3	Personal computers	C	They are mid-range systems.
4	Minicomputers	D	They are used to host multiple operating systems.
5	Desktops	E	They have microprocessors as their central processing units.
6	Netbooks	F	They are used in households.
7	Palmtops	G	They are microcomputers supplemented with a keyboard and a mouse.
8	Supercomputers	H	They are hand-held computers.

2 *Explain in your own words the meaning of the following terms.*

1 Customer ....
2 Worldwide ....
3 Monitor ....
4 Size ....
5 Widely ....
6 Variety ....
7 Costs ....
8 Step ....

3 *Match the words to make correct collocations.*

1	Quantum	A	computers
2	Molecular	B	physics
3	Processing	C	supply
4	Personal	D	players
5	Power	E	theory
6	Audio	F	capacity
7	External	G	crystal
8	Liquid	H	adapter

4 *Do the collocations you found work? Write sentences for each of them and check in pairs.*

5 *Using the key words describe the main types of computers and their features.*