# Output Devices

Output devices provide the processed data to the user.

Common output formats are printed paper, sound, video and on-screen documents. They let the computer communicate with the user. Examples of devices that take advantages of these formats are:

**Monitor**
The most common output device is the monitor or VDU which is used for displaying output on screen.
Modern monitors, where the case isn't more than a few centimetres deep, are usually Liquid Crystal Displays (LCD) or Thin Film Transistors (TFT) monitors.
Older monitors, where the case is likely to be around 30 cm deep, are Cathode Ray Tube (CRT) monitors.

**Printers**
1. **Laser printers** are quite expensive to buy and run but produce a high quality output and are quiet and fast.
2. **Ink-jet printers** offer black and white or colour printing with reduced levels of quality and speed. Colour ink jet printers are cheaper to buy than colour laser printers.
3. **Dot matrix printers** are not so common today. They are comparatively noisy and low quality but are cheap to run and are used when carbon copies or duplicates need to be made, such as for wage slips. Also, they are useful in dirty environments such as a garage because they are much sturdier than the other two types of printer.

**Plotters**
A plotter can be used to produce high quality, accurate, A3 size or bigger drawings. They are usually used for Computer Aided Design (CAD) and Computer Aided Manufacture (CAM) applications, such as printing out plans for houses or car parts.

**Cutters**
A cutter is used to cut the hard material such as metals as per the design drawn in special computer software.

**Other output devices**
Many other types of output device exist including:
- speakers
- projectors
- buzzers
- motors
- switched outputs
- lights
- mechanical devices, eg a robot arm

# Practice Questions

**Question 1:** List down the names of three output devices that may be used at ATM machine along with their purpose.

Device 1:

Purpose:

Device 2:

Purpose:

Device 3:

Purpose:

**Question 2:** List down the names of three output devices that may be used at Point-of-Sale (POS) along with their purpose.

Device 1:

Purpose:

Device 2:

Purpose:

Device 3:

Purpose:

**Question 3:** List down the names of three types of printers with one advantage and disadvantage for each.

Name 1:

Advantage:

Disadvantage:

Name 2:

Advantage:

Disadvantage:

Name 3:

Advantage:

Disadvantage: