

❖ Printers

Printer is an **output device**, which is used to print information on paper.

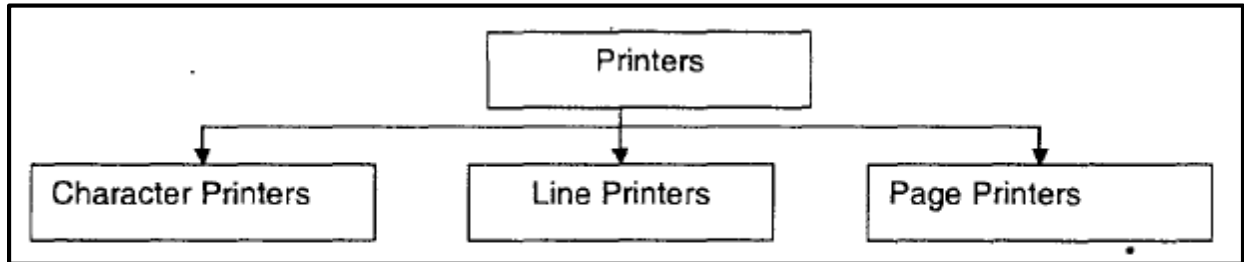


Figure: Types of Computer printers

There are two types of printers:

1. Impact Printers.
2. Non-Impact Printers.

1.

2. Impact Printers: The impact printers print the characters by striking them on the ribbon which is then pressed on the paper.

Characteristics of Impact Printers are the following: (advantages)

- Very low consumable costs.
- Very noisy.
- There is physical contact with the paper to produce an image.

The **impact printers** can be classified **into two types**:

A. Character printers: are the printers which print one character at a time.

Example of this printers **Dot Matrix Printer(DMP)** and **Daisy Wheel**

❖ Dot Matrix Printer

In the market one of the most popular printers is Dot Matrix Printer. These printers are popular because of their ease of printing and economical price. Each character printed is in form of pattern of dots and head consists of a Matrix of Pins of size (5*7, 7*9, 9*7 or 9*9) which come out to form a character that is why it is called Dot Matrix Printer.

Advantages:

- ❖ Inexpensive.
- ❖ Widely Used.
- ❖ Other language characters can be printed.

Disadvantages:

- Slow Speed.
- Poor Quality.



B. Line printers: are the printers which print one line at a time. Example of this printers Drum Printer and Chain Printer.

❖ Drum Printer

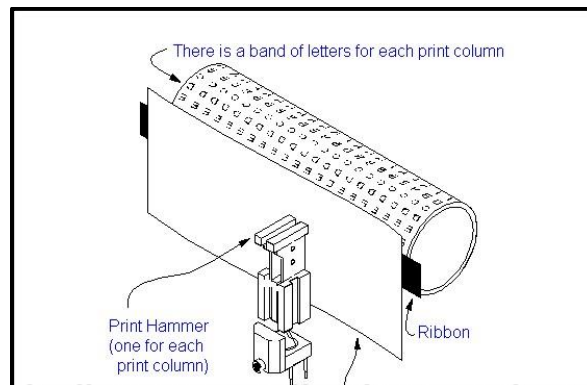
It is a line printer. It has a drum that rotates at high speed. A set of characters is embossed on the drum. It prints one line of characters at a time. The hammer for a particular character position is activated when that character on the drum passes under it to produce character impression on paper.

Advantages

- Very high speed.

Disadvantages

- Very expensive
- Characters fonts cannot be changed.



3. Non-impact Printers: Non-impact printers print the characters without using ribbon. These printers print a complete page at a time so they are also called as **Page Printers.**

Characteristics of Non-impact Printers

- Faster than impact printers.
- They are not noisy.
- High quality.
- Support many fonts and different character size.

These printers are of two types

- Laser Printers
- Inkjet Printers

❖ Laser Printers

These are non-impact page printers. They use laser lights to produce the dots needed to form the characters to be printed on a page.

Advantages:

- Very high speed
- Very high quality output
- Give good graphics quality
- Support many fonts and different character size

Disadvantages:

- Expensive.
- Cannot be used to produce multiple copies of a document in a single printing.

❖ Inkjet Printers

Inkjet printers are non-impact character printers based on a relatively new technology. They print characters by spraying small drops of ink onto paper. Inkjet printers produce high quality output with presentable features. They make less noise because no hammering is done and these have many styles of printing modes available. Color printing is also possible. Some models of Inkjet printers can produce multiple copies of printing also.

Advantages:

- High quality printing.
- More reliable.

Disadvantages:

- Expensive.
- Slow as compared to laser printer.

