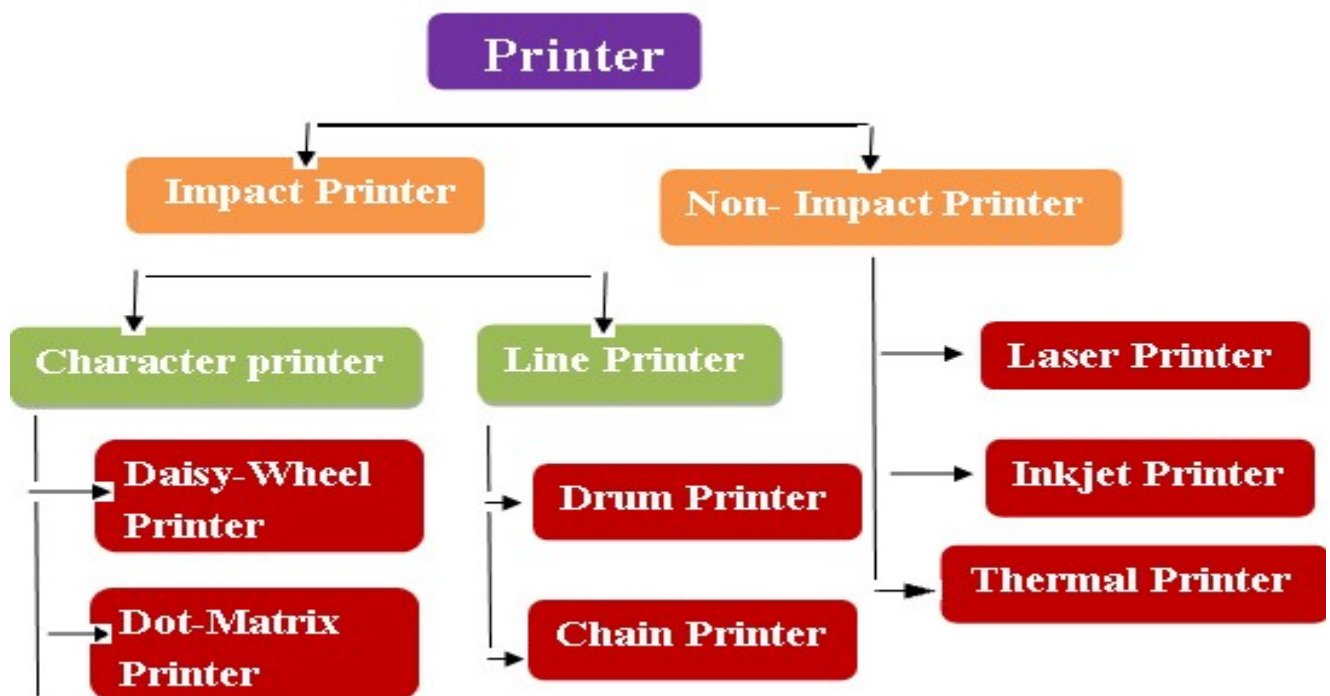


**Printer:** - Printer is an external hardware output device that takes the electronic data stored on a computer or other device and generates a hard copy of it. Printers are one of the most popular computer peripherals and are commonly used to print text and photos.

## **Types of printer:-**



**Impact Printer:-**It is a type of printer that works by direct contact of an ink ribbon with paper. These printers are typically loud but remain in use today because of their unique ability to function with multipart forms. An impact printer has mechanism similar to a typewriter. Example of Impact Printers: Dot-matrix printers, Daisy-wheel printers, and line printers.

**Non-Impact Printers:-**It is a type of printer that does not hit or impact a ribbon to print. They used laser, xerographic, electrostatic, chemical and inkjet technologies. Non-impact printers are generally much quieter. They require less maintenance and service than impact printers. Example of Non-Impact Printers is Inkjet printers and Laser printers.

### **Difference between Impact and Non-Impact Printers:**

<b>IMPACT PRINTER</b>	<b>NON IMPACT PRINTER</b>
Produces characters and graphics on a piece of paper by striking it is called impact printer.	A type of printer that produces characters and graphics on a piece of paper without striking.
It prints by hammering a set of metal pin or character set.	Printing is done by depositing ink in any form.
Electromechanical devices are used	No electromechanical device is used.
Faster speeds around 250 words per second.	Slower speeds around 1 page per 30 seconds.
Have banging noise of needle on paper	Works silently
Dot-matrix printer, Daisy wheel printers, line printer are examples.	inkjet printers, photo printers, laser printers are examples .

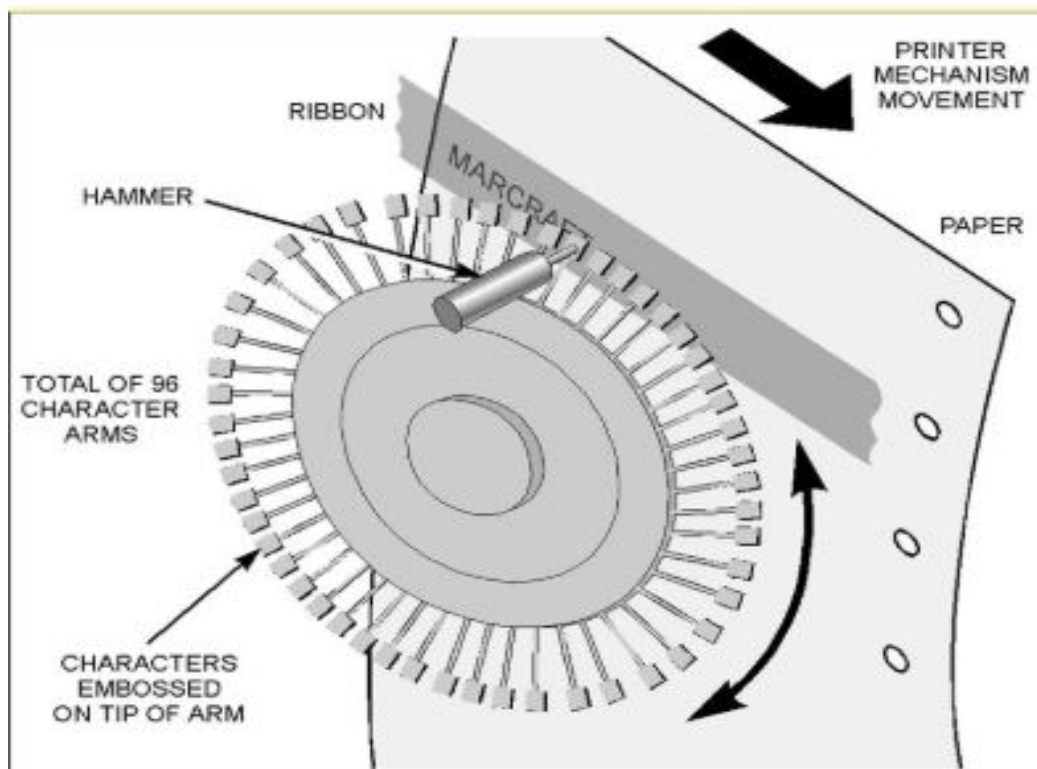
### **Types of Character Printes:-**

**Dot-Matrix Printers:-**The technology behind dot-matrix printing is quite simple. The paper is pressed against a drum (a rubber-coated cylinder) and is intermittently pulled forward as printing progresses. The electromagnetically-driven printhead moves across the paper and strikes the printer ribbon situated between the paper and printhead pin. The impact of the printhead against the printer ribbon imprints ink dots on the paper which form human-readable characters.

Dot-matrix printers vary in print resolution and overall quality with either 9 or 24-pin printheads. The more pins per inch, the higher the print resolution. Most dot-matrix printers have a maximum resolution of around 240 dpi (dots per inch). It is ideal for environments that must produce carbon copies through the use of special multi-part documents. These documents have carbon (or other pressure-sensitive material) on the underside and create a mark on the sheet underneath when pressure is applied. Retailers and small businesses often use carbon copies as receipts or bills of sale.



**Daisy-Wheel Printers:** These printers have printheads composed of metallic or plastic wheels cut into petals. Each petal has the form of a letter (in capital and lower-case), number, or punctuation mark on it. When the petal is struck against the printer ribbon, the resulting shape forces ink onto the paper. Daisy-wheel printers are loud and slow. They cannot print graphics, and cannot change fonts unless the print wheel is physically replaced.



### Exercise:

1. List the different types of printers.
2. Differentiate between impact and non impact printers.
3. In which sector dot matrix printer is famous? Explain.