PRINTER AND SCANNER

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PRINTER

The printer - a device designed to print information from a computer onto paper, or, as they say in the "computer" language to a solid support. At the same time he called the information transfer process printing, and the resulting document - printing.

Matrix printer

The mechanism of dot-matrix printer (the oldest of the types of printers used today) was invented by the Japanese in 1964.

It works, in general, is simple. The image on the sheet is created by the print head, consisting of a set of needles (matrix), which are driven by electromagnets.

- Dot matrix printers, although it was forced out of office and the scope of more modern devices are still used in some areas. Thus, printing sales receipts based on such a principle.
- Low quality, similar to the typewriter, no longer allows the use of matrix devices in other areas. Furthermore, among the disadvantages of data printers - low-speed printing and noisy work.

Jet printer

- The principle of an inkjet printer is similar to the action of the matrix: the image is created from points. Only heads with needles instead of matrix used in these (head), which prints the liquid dyes.

THE INK MAY BE:

- water (used in most household and office equipment);
- oil (used for industrial marking);
- pigment (the best option for high-quality images - photos, for example);
- Solvent (used for printing outdoor advertising, posters, stands as resistant to water);
- thermal transfer (with the help of their image is put on the clothes).

Laser printer

- Laser technology (to be precise - electro photographic technology) appeared in 1938. This printing method, called electrography first, then - xerography and today more commonly known as laser printing, designed for speed, efficiency and high quality print.

- Print speed is significantly higher than that in the ink jet printer (even personal laser printer - 10-20 ppm).

- The advantage of the laser printer is also its ability to print on virtually any paper, without losing as a fingerprint.

LED PRINT

- An offshoot of laser technology is the LED printer. Their difference - in the source of light. Instead of a single laser beam - a whole line of LEDs. Each point corresponds to a line in the LED, so the light source does not move, unlike the laser technology.

- This - the first advantage: less mechanics - the higher the level of reliability. The second advantage - High Speed (40 ppm). In addition, the print quality is higher than that of the laser printer, since there are no jitter distortion.
- However, there is an LED printer is one significant drawback - the high cost.

Drum printers

- Drum printers also have fallen into disuse, although the speed of their work has been and remains the highest among all existing printers.
- It got its name due to the main element - the drum equal to the width of the sheet, with relief image of letters and numbers.

FLAP (OR CHAMOMILE) PRINTERS

- Flap (or chamomile) printers on the principle of operation is similar to the drum, only a set of letters located on the floppy disk petals, which rotated.
- The desired tab pressed against the ink ribbon and paper, leaving an imprint. Get color imprint could be putting a tape of another color.

SCANNERS

Scanners are primarily designed to convert information that is on paper into electronic format.

FLATBED SCANNERS

- Flatbed scanners are the most common and user-friendly. Flatbed scanners are capable of providing high quality and reasonably good scanning speed. In appearance reminiscent of the tablet.
- If you open the scanner cover, the inside is transparent glass and underneath the scanning mechanism. The object to be scanned lies down on the glass scanning surface. The lid must be closed.

HAND-HELD SCANNERS

The hand-held scanner is no engine. The object that you want to scan the user must be moved manually. The only advantage of these scanners is low cost. But handheld scanners have a lot of shortcomings:

- Low resolution;
- Low scan quality (image may be skewed because the scanner manually moved at a constant speed rather problematic);
- Low speed;

BOOK SCANNERS

- Designed to stitch up the scanning of documents. In contrast to the flatbed scanner scans it is carried out face up. Book scanners provide excellent scan quality, and even able to smooth out distortions, which are inevitable in the excesses of the book.

PLANETARY SCANNERS

- In such scanners, there is no contact with the object of beir scanned, so they are designed primarily for documents that are easily damaged. It may als be used for scanning books.

DRUM SCANNERS

- They provide a very high quality scanning. They are used in the printing industry.

BARCODE SCANNERS

- Designed for use in stores to scan the bar code of the product.

SLIDE SCANNERS

- Designed for film scanning slides.

3D SCANNERS

- Designed to scan real physical objects. During this scan the real object is digitized and obtained three-dimensional computer model of the object.

ULTRASOUND SCANNERS

- Designed exclusively for use in medicine for the study of internal organs.

THANK YOU FOR ATTENTION!