ઇન્ફર્મેશન ટેકનોલોજિ
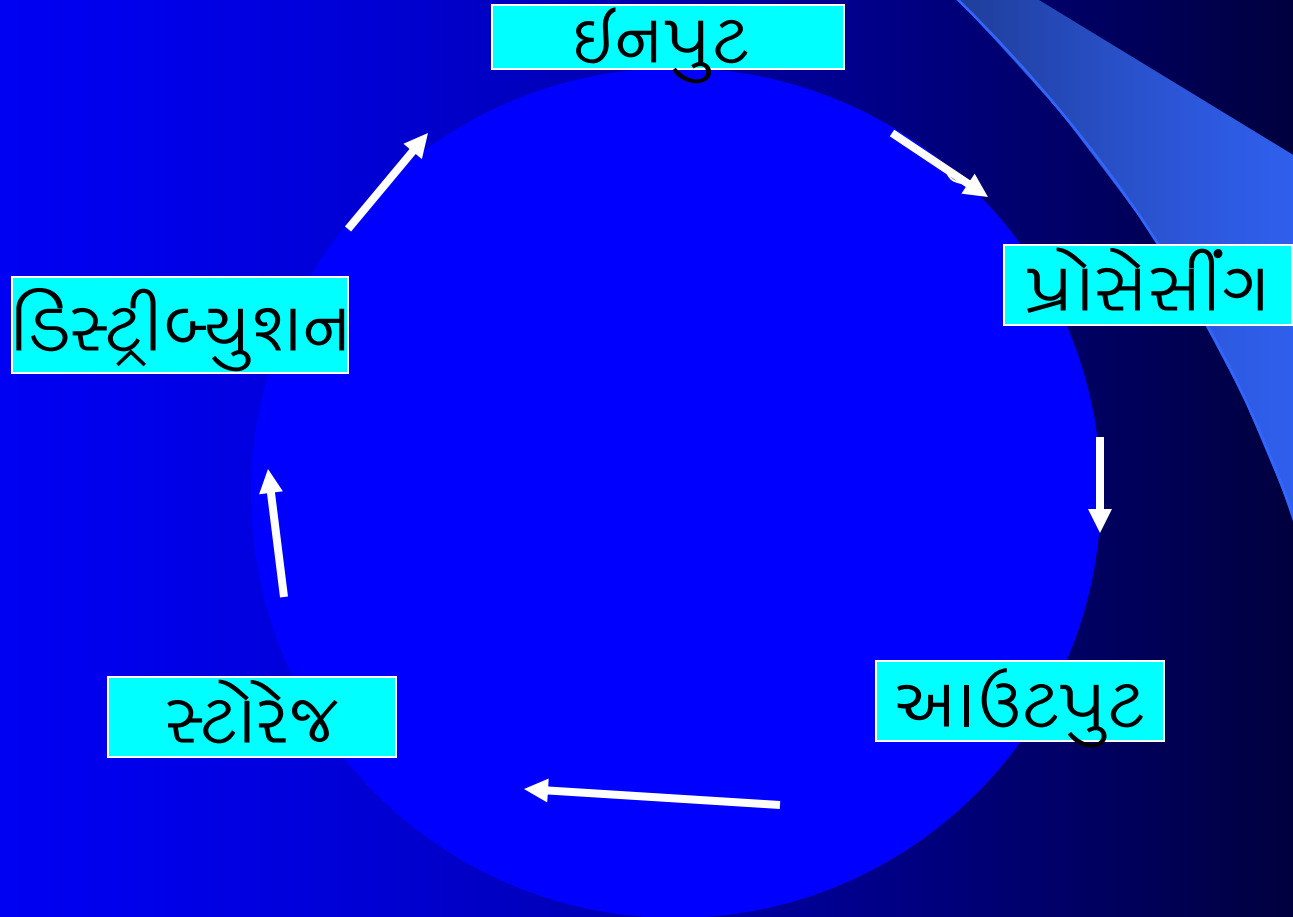
- માહિતીનું સંયોજન, પ્રોસેસીંગ, સંગ્રહ,પ્રસારણ અને આ પ્રક્રિક્યામાં સહાયભૂત થતાં સાધનો
- ઇન્ફર્મેશન પ્રોસેસીંગ સાયકલ

ઇનપુટ

પ્રોસેસીંગ

ડિસ્ટ્રીબ્યુશન

આઉટપુટ

સ્ટોરેજ

ઇન્ફર્મેશન ટેકનોલોજીનો ઉપયોગ

- અવકાશ ક્ષેત્રે
- હવાઇ ક્ષેત્રે
- સંશોધનમાં
- સંરક્ષણ ક્ષેત્રે
- વાણિજ્ય ક્ષેત્રે
- બેન્કિંગ
- રેલ્વે-એર-બસ રિઝર્વેશન
- ચલચિત્ર તથા એનિમેશન

- પોલીસતંત્રમાં
- વિજ્ઞાનમાં
- હવામાન વરતારો
- ખગોળશાસ્ત્ર
- યંત્રમાનવ(ઉધ્યોગમાં)
- ડિઝાઈનત્રેત્રે
- સંદેશા વ્યવહાર
- માહિતી મેળવવા
- શિક્ષણમાં

ડેટા અને ઈન્ફર્મેશન

- કાચી માહિતી
- સીધી રીતે બિનઉપયોગી

- કાચી માહિતી પર પ્રોસેસ થયા પછીની તૈયાર માહિતી
- સીધી રીતે મૂળસ્વરૂપમાં ઉપયોગી

- માહિતી અન્ય બાબત માટે ડેટા બની શકે
- ડેટા ⟶ પ્રોસેસિંગ ⟶ ઈન્ફર્મેશન

હાર્ડવેર અને સોફ્ટવેર

- દ્રશ્યમાન ભૌતિક ભાગો- કમ્પ્યૂટર ના ભૌતિક ભાગો

- અડકી-સ્પર્શ કરી શકાય
- દા.ત. ઈનપુટ-આઉટપુટ ઈડવાઈસ, સી.પી.યુ.

- સૂચનાઓનો સમૂહ-પ્રોગ્રામ જે કમ્પ્યૂટરના કાર્યોને નિયંત્રિત કરે છે

- અડકી કે જોઈ ના શકાય

- ઓપરેટિંગ સોફ્ટવેર (Windows,Unix, Dosz) અને એપ્લીકેશન સોફ્ટવેર (MS-Word,Excel, બેંન્ક, રેલ્વે, ડોક્ટર, ટેલિ વગેરે)

ઇનપુટ ડિવાઈસ
કિ બોર્ડ

ન્યુમેરિક અને સિમ્બોલ કિ - ૦ થી ૯ અને #$%^&*@

- ફંકશન કિ - સોફ્ટવેર પ્રમાણે કાર્યો ... **F1, F2, F3.....**
- એસ્કેપ કિ - આદેશ રદ કરવા
- બેક સ્પેશ
- એન્ટર
- ટેબ
- કેપ્સ લોક
- શિફ્ટ
- સ્પેશબાર
- એરો કિ-પેજ અપ-ડાઉન
- ન્યુમેરિક કિ પેડ

- Alphamumeric Key
- Special Key

જોય સ્ટીક

સ્કેનર માઉસ

માઇક્રોફોન

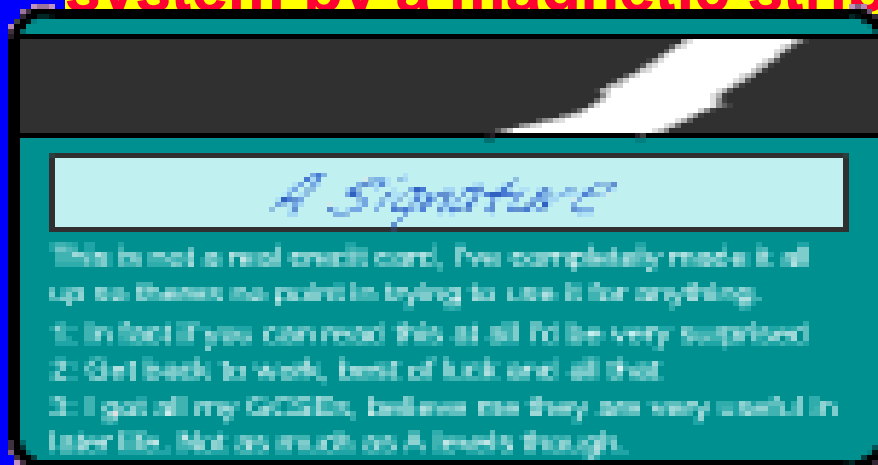# ડિજિટલ કેમેરા

બારકોડ રીડર

સીડી

MICR (Magnetic Ink Character Reader) –

magnetic ink characters are the strange looking numbers that appear at the bottom of cheques. Banks use MICR to read the numbers from the bottom of cheques to obtain data such as account numbers and bank sort codes. This particular font is used because it is easy for a machine to discriminate between characters. The ink is magnetised because it makes it immune to creases or dirty marks.
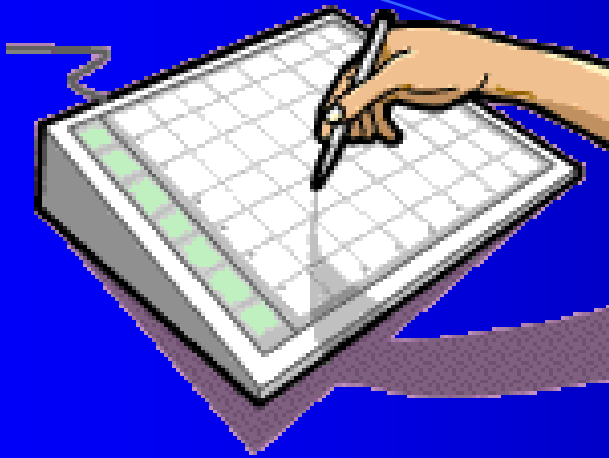
Magnetic strip (or stripe) reader

Magnetic stripes are built into many plastic cards such as cheque guarantee cards, cash-point cards and personal identity cards. The magnetic strip on the back of the card can hold the personal details of the card owner and, with the necessary PIN, will allow access to secure information e.g. bank account details. Data stored on the strip is scanned and input into a computer system by a magnetic stripe reader.

A Signature

This is not a real credit card, I've completely made it all up so theres no point in trying to use it for anything.

1: In fact if you can read this at all I'd be very surprised

2: Get back to work, best of luck and all that

3: I got all my GCSEs, believe me they are very useful in later life. Not as much as A levels though.

OMR (Optical Mark Reader) –

 this reads marks made by pencil on a printed form into the computer. OMR systems are suited to reading pre-printed forms and check-boxes such as National Lottery number selection sheets and multiple-choice exam papers

OCR : Optical Character Reader

Graphics tablet

This consists of a flat pad (the tablet) on which the user draws with a special pen. As the user draws on the pad the image is created on the screen. Using a graphics tablet a designer can produce very accurate on-screen drawings.

Touch screen - this is a special type of <u>VDU</u>, which has a grid of light beams or fine wires criss-crossing the screen. When the screen is touched (usually to choose an on-screen option), the computer senses where you have pressed. The information is stored on the computer and the touch screen is simply an interface. Touch screens have the benefit of being very robust

OUTPUT Devices

Monitors or Visual Display Units (VDUs)
These are the most common output device and include:

- Desktop monitors which are also known as Cathode Ray Tube (CRT)

- Liquid Crystal Displays (LCD) which are also known as Thin Film Transistors (TFT)

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.

•Dot-matrix printers (impact printer)

Ink jet printers (non-impact printer)

ink jet printers are **cheape**r to buy than colour **laser printers.**

•The print quality is almost the same as a laser printer's.

> •Problems with the ink
>> •The ink is very expensive
>> •The ink is water soluble and will run if the paper gets wet

•Highest cost per page of all the printers

•For producing color documents, it has the highest quality at a reasonable price.

•Use drops of magnetic ink to produce dots on a page

 to produce text or images.

Laser printers produce a very high quality output, are very quiet and very fast. Laser colour printers are quite expensive to buy

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.

•**Speakers**
•**LCD projectors**

Drum Printer

Drum Printers are some of the fastest printers made before the advent of modern super-high speed laser printers. Models in the early 1990s could run at speeds of over 6000 lines per minute (yes, 100 lines per second or about 90 pages per minute). By comparison, the fastest dot matrix printers were pushing towards 200 characters (2-3 lines) per second.

Thermal Printer

Speakers

- used to output sound