

UNIT 1

Basic Introduction

The first week was mainly focused on introduction to Computer's Hardware and Data processing structure.

The course started with the introduction of Digital technology. The Hallmark for the Digitally based technologies is that they work on very low power consumption. For instance our Laptop and similar machines hardly require a few 5-9 volts for its functioning. Digital technology uses Binary codes for its processing and storage.

On the other extreme , we have Analog Technology which functions on some physical parameters like Sound waves, signals etc. These Analog technologies are efficient mediums for communication and signal processings.

BINARY-DECIMAL NUMBERS CONVERSION

In the second week we focused on how the computer reads only binary numbers . All words, numbers and symbols are represented by binary numbers for our computers. So to get through the Decimal-binary conversion mechanism , we did some examples. We followed some important algorithms while these conversions like Binary Arithmetic, 1's and 2's complement, reverse method for getting Digital no. back. I was particularly interested in 1's and 2's complement . The systems are used for representing negative binary numbers and simplify the subtraction process by smartly transforming it to addition.

We also had a 15 marks short quiz based on the binary conversion that we did.