C PROGRAMMING LANGUAGE

LECTURE-1

Algorithm:-

Any programming design has 2 phases. They are:-

→ problem solving phase:-

⇒ This creates a algorithm that solves the problem.

→ Implementation phase:-

⇒ This translates algorithm into programming language.

* Algorithm is a step-by-step procedure for solving a problem.
* If the algorithm is written in english sentences then that is "pseudo algorithm."
* Input, output, finiteness, effectiveness and definiteness are the properties of an algorithm.
* Algorithm must have zero or more number of inputs and produce one or more outputs.
* Finiteness means the algorithm must terminate in finite no. of steps.
* Each step of algorithm must be stated clearly that is definiteness.
* Effectiveness means each step of algorithm must be easily convertable into program statement.

Ex:- Algorithm for finding the average of 3 no.'s.

Step1:- Start

Step2:- Read 3 numbers i.e., a, b, c.

step 3:- compute sum of the numbers (sum = a+b+c)

step 4:- compute avg = sum/3

step 5:- print avg value

step 6:- stop.