

FACULTY OF ENGINEERING AND TECHNOLOGY
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Computer System and Programming in 'C'
CS-101/201

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ALGORITHM

Algorithm

An algorithm is a finite set of instructions that if we followed in sequence it accomplish a particular task in **finite time** and requires **finite space** in memory.

- There are in general **five criteria** which an algorithm must satisfy-

1. Input
2. Output
3. Definiteness
4. Finiteness
5. Effectiveness

Algorithm to add two numbers

Step 1: Input first number as P
Step 2: Input second number as Q
Step 3: **Set Sum=P+Q**
Step 4: Print Sum
Step 5: End.

Algorithm for swapping of two values

Step 1: Input value of first number in P
Step 2: Input value of second number in Q
Step 3: **Set Temp = P**
Step 4: **Set P = Q**
Step 5: **Set Q= Temp**
Step 6: Print P and Q
Step 7: End.

Homework

- Write an algorithm to calculate the area of rectangle. Given its length and width.
- Write an algorithm to calculate the perimeter of a circle. Given its radius.
- Write an algorithm to swap values of two numbers without using a third variable.
- Write an algorithm to find the factorial of a given number.

Thank You.



BTQ

BTQ: Brain Teaser Question

How many letters are in the alphabet?

