



# SNS COLLEGE OF TECHNOLOGY



Coimbatore-36.

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**COURSE NAME : 23CST101– PROBLEM SOLVING & C PROGRAMMING**

**I YEAR/ I SEMESTER**

**UNIT – I INTRODUCTION TO PROBLEM SOLVING TECHNIQUES**

**Topic: Notation (Pseudo Code)**

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# Pseudo Code





## What is Pseudo Code?

- Pseudo code consists of short, readable and formally styled English languages used for explain an algorithm.
- It does not include details like variable declaration, subroutines.
- It is easier to understand for the programmer or non programmer to understand the general working of the program.
- It is not a machine readable
- Pseudo code can't be compiled and executed.
- No standard syntax.

```
IF a1 > a2
    PRINT a1
ELSE
    PRINT a2

if a1 > a2{
    print(a1)
}
else{
    print(a2)
}
```

# Pseudocode



WTMatter



# Pseudo Code

## Guidelines for writing pseudo code:

- Write one statement per line
- Capitalize initial keyword
- End multiline structure
- Keep statements language independent

## Common keywords used in pseudocode

*begin ... end:* These keywords are used to start and finish pseudocode. Begin is the first line and end is the last line of pseudocode.

*accept:* This keyword is used to obtain an input from a user.

*display:* This keyword is used to present a result or an output.

*if ... else... endif:* These keywords are used in decision-making.

*//:* Comment

*Do ... while, for ..., repeat ... until:* Represent loop



# Pseudo Code

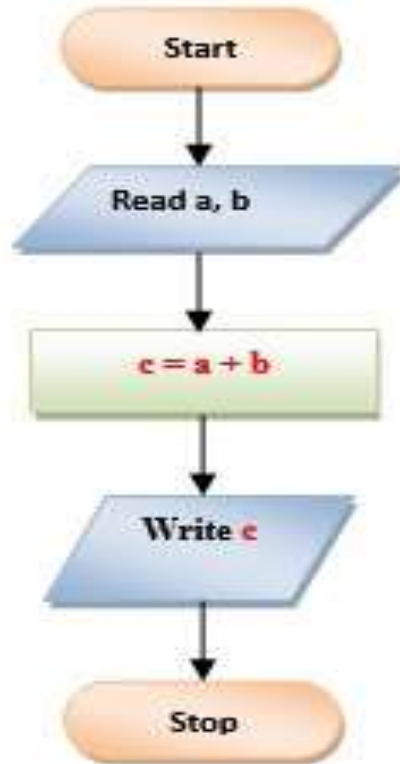
Example for Sequence Method:

## To find sum of two numbers

### Pseudo code

BEGIN  
GET a,b  
ADD  $c=a+b$   
PRINT c  
END

### Flowchart



### Program

```
#include<stdio.h>

int main()
{
    int a, b, c;

    printf("Enter value of a: ");
    scanf("%d", &a);

    printf("Enter value of b: ");
    scanf("%d", &b);
    c = a+b;

    printf("Sum of given two numbers is: %d", c);

    return 0;
}
```



# Pseudo Code

Example for Selection Method:

## Greatest of two numbers

### Pseudocode

```
PROGRAM PrintBiggerOfTwo:  
  Read A;  
  Read B;  
  IF (A>B)  
    THEN Print A;  
    ELSE Print B;  
  ENDIF;  
END.
```

### Flowchart



### Program

```
#include<stdio.h>  
  
int main()  
{  
  
  int A, B;  
  
  printf("Enter values of A, B: ");  
  scanf("%d %d", &A, &B);  
  
  if (A>B)  
    printf("A is Larger");  
  else  
    printf("B is Larger");  
  
  return 0;  
}
```



# Pseudo Code

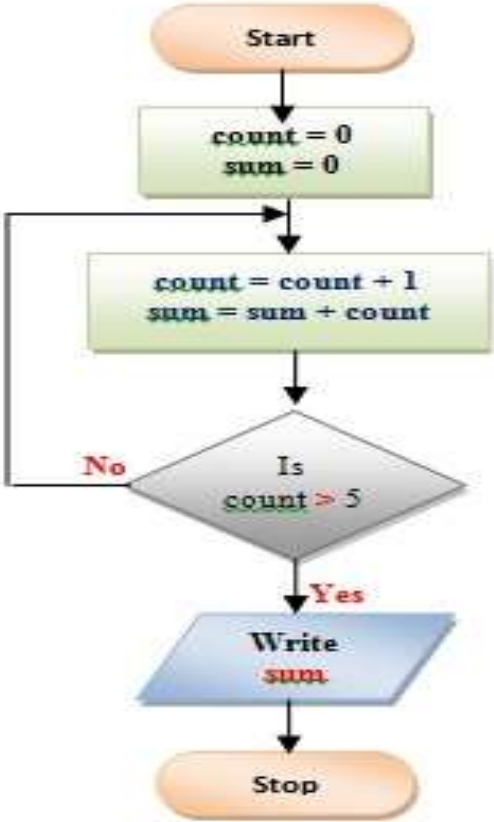
Example for Iteration Method:

## Find the Sum of First Five Natural Numbers

### Pseudo code

```
BEGIN
NUMBER counter, sum=0
FOR counter=1 TO 100 STEP 1 DO
    sum=sum+counter
ENDFOR
OUTPUT sum
END
```

### Flowchart



### Program

```
#include<stdio.h>
int main()
{
    int count, sum;
    sum = 0;
    for (count = 1; count<=5; count++)
    {
        sum = sum +count;
    }
    printf("Sum of 1st 5 numbers is: %d", sum);
    return 0;
}
```



# Comparisons



Algorithm	Flowchart	Pseudo code
An algorithm is a sequence of instructions used to solve a problem	It is a graphical representation of algorithm	It is a language representation of algorithm.
User needs knowledge to write algorithm.	not need knowledge of program to draw or understand flowchart	Not need knowledge of program language to understand or write a pseudo code.



Thank  
you

thankyou