PSEUDOCODE

**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, because it is not based on any programming language.

• It gives us the sketch of the program before actual coding.

• It is not a machine readable

• Pseudo code can’t be compiled and executed.

• There is no standard syntax for pseudo code.

**Guidelines for writing Pseudo code**

• Write one statement per line

• Capitalize initial keyword

• Indent to hierarchy

• End multiline structure

• Keep statements language independent

**Common keywords used in Pseudo code**

The following gives common keywords used in pseudo codes.

1. //: This keyword used to represent a comment.

2. BEGIN,END: Begin is the first statement and end is the last statement.

3. INPUT, GET, READ: The keyword is used to inputting data.

4. COMPUTE, CALCULATE: used for calculation of the result of the given expression.

5. ADD, SUBTRACT, INITIALIZE used for addition, subtraction and initialization.

6.OUTPUT, PRINT, DISPLAY: It is used to display the output of the program.

7.IF, ELSE, ENDIF: used to make decision.

8.WHILE, ENDWHILE: used for iterative statements.

9.FOR, END FOR: Another iterative incremented / decremented tested automatically.

**ADVANTAGES OF PSEUDO CODE**

• Pseudo is independent of any language; it can be used by most programmers.

• It is easy to translate pseudo code into a programming language.

• It can be easily modified as compared to flowchart.

• Converting a pseudo code to programming language is very easy as compared with converting a flowchart to programming language.

**DISADVANTAGES OF PSEUDO CODE**

• It does not provide visual representation of the program’s logic.

• There are no accepted standards for writing pseudo codes.

• It cannot be compiled nor executed.

• For a beginner, It is more difficult to follow the logic or write pseudo code as compared to flowchart.

**EXAMPLES**

**1.Calculating Sample Interest**

BEGIN

READ P, n, r

CALCULATE S

SI=(p\*n\*r)/100

DISPLAY SI

END

**2.Print cube of a number**

BEGIN

GET n

INITIALIZE i=1

WHILE(i<=n) DO

           PRINT i\*i\*i

           i=i+2

ENDWHILE

END

**3.To check odd or even number**

BEGIN

READ num

IF (num%2==0) THEN

DISPLAY num is even

ELSE

DISPLAY num is odd

END IF

END

**4.To check greatest of two numbers**

BEGIN

READ a,b

IF (a>b) THEN

DISPLAY a is greater

ELSE

DISPLAY b is greater

END IF

END

**5.To print n even numbers**

BEGIN

GET n

INITIALIZE i=2

WHILE(i<=n) DO

           PRINT i

           i=i+2

ENDWHILE

END

**6.To find factorial of a given number.**

BEGIN

GET n

INITIALIZE i=1,fact=1

WHILE(i<=n) DO

           fact=fact\*i

           i=i+1

ENDWHILE

PRINT fact

END

**7.To print all natural numbers up to n.**

BEGIN

GET n

INITIALIZE i=1

WHILE(i<=n) DO

PRINT i

i=i+1

ENDWHILE

END

**8.To check whether given number is +ve, -ve or zero.**

BEGIN

GET n

IF(n==0) THEN

           DISPLAY “ n is zero”

ELSE

           IF(n>0) THEN

            DISPLAY “n is positive”

ELSE

            DISPLAY “n is positive”

END IF

END IF

END

**9.To find sum of a given number.**

BEGIN

GET n

INITIALIZE i=1,sum=0

WHILE(i<=n) DO

           sum=sum+i

           i=i+1

ENDWHILE

PRINT sum

END

**10.To check greatest of three numbers**

BEGIN

READ a, b, c

IF (a>b) THEN

IF(a>c) THEN

DISPLAY a is greater

ELSE

DISPLAY c is greater

END IF

ELSE

IF(b>c) THEN

DISPLAY b is greater

ELSE

DISPLAY c is greater

END IF

END IF

END