Assignment: 01

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1. Write a program that takes two number as input and prints their sum.

Pseudo code:

```
PROGRAM SumofTwoNumber:
```

```
Read num1, num2;
Print num1 + num2;
END.
```

2. Write a program that prints all even number from 1 to 100.

Pseudo code:

```
PROGRAM Even:
```

```
Read num=1;
```

WHILE(num<=100) **DO**

IF(num%2==0) **THEN**

Print num:

End IF

num=num+1;

End WHILE

END.

3. Write a function that checks IF a given year is a leap year or not.

Pseudo code:

PROGRAM LeapYear:

```
Read year;
```

Boolean isLeap = false;

```
IF (year % 4 == 0) THEN
    IF (year % 100 == 0) THEN
        IF (year % 400 == 0) THEN
            isLeap = true;
        ELSE
            isLeap = false;
        END IF
        ELSE
        isLeap = true;
        END IF
```

```
isLeap = false;
isLeap = false;
END IF
IF (isLeap == true) THEN
    Print "It is a leap year";
ELSE
    Print "It is not a leap year";
END IF
END.
```

4. Write a program that converts kilometre per hours to mile per hours.

Pseudocode:

PROGRAM Convert:

Read KM;

Print=KM/1.609;

END.

5. Write a Pseudocode to check whether a number is buzz number or not.

Pseudo code:

PROGRAM Buzz:

Read num;

IF (num%10==7 OR num%7==0) **THEN**

Print num 'is' bzz;

Else

Print num 'is' not buzz,

END IF

END.

6. Write a program that ask user for number and prints the multiplication table of that number upto 10.

Pseudo code:

PROGRAM Table:

Read num;

count=1;

WHILE(count<=10) DO

Print num*count;

count=count+1;

End for loop;

END.

7. Write a program that computers the factorial of a number.

Pseudo code:

PROGRAM Factorial:

```
Read num:
   Read fact=1;
   Initialize count=2;
   WHILE(count<=num) DO
   fact=fact*count;
   count=count+1;
   End WHILE loop
   Print Fact;
   END.
8. Write a function that checks whether a number is prime or not.
   Pseudo code:
   PROGRAM Prime:
   Read num;
   Boolean isPrime = true;
   count = 2;
     WHILE (count < num) DO
        IF (num % count == 0) THEN
          isPrime = false;
          EXIT WHILE
       END IF
        count = count + 1;
     END WHILE
     IF(isPrime == true) THEN
        Print num " is a prime number";
     ELSE
        Print num " is not a prime number";
     END IF
   END.
9. Write a program....?
   Pseudo code:
   Program Triangle:
   Read side1, side2, side3;
   IF(side1==side2 and side2==side3) THEN
   Print Equilateral;
   Else IF(side1==side2 or side1==side3 orside2==side3)THEN
   Print isosceles;
   Else
   Print Scalene;
   End of IF
   END.
```

```
10. Print the pattern..?
      Pseudo code:
      PROGRAM Pattern:
         Read row = 5;
         count = 1;
         WHILE (count <= row) DO
           count2 = 1;
           WHILE (count2 <= count) DO
             Print "*";
             count2 = count2 + 1;
           END WHILE
           Print newline
           count = count + 1;
        END WHILE // End of outer loop (count)
      END.
Bonus Question:
Pseudo code:
      PROGRAM palindrome:
      Read input, reminder, quotient;
      Read result=0;
      quotient=input;
      WHILE(quotient!=0) DO
      reminder =input% 10;
      result=result*10+reminder;
      quotient=quotient/10;
      END WHILE
      IF(result==input)THEN
      Print palindrome;
      ELSE
      Print Not palindrome;
      END IF
      END.
```