**Assignment # 01**

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

PROGRAM TwoSum:

Read num1;

Read num2;

Print num1 + num2;

END

1. Write a program that prints all the even numbers from 1 to 100

PROGRAM Even1To100:

num = 2;

WHILE (num<=100)

Print num;

num = num+2;

ENDWHILE

END

1. Write a function that checks if a given year is leap year or not

PROGRAM isLeapYear:

Read year;

If (year/4 gives no remainder)

THEN Print “Leap Year”

ELSE Print “Not a Leap Year”

ENDIF

END

1. Write a program that converts kilometers per hours to miles per hours. Hint 1km = 0.621371

PROGRAM kmphTOmph:

Read kmph;

mph = kmph/0.621371;

Print mph;

END;

1. Write a pseudocode to check whether a number is buzz number or not. Hint a number is said to be if it is divisible by 7 or it end with 7.

PROGRAM isBuzz:

Read num;

IF (num/7 gives no remainder OR num/10 gives the remainder 7)

THEN Print “buzz number”;

ELSE Print “Not a buzz number”;

ENDIF

END

1. Write a program that asks user for the number and prints the multiplication table of the number up to 10.

PROGRAM multiplicationTable:

counter = 1;

num;

Print “Enter the number”;

num = (num gave by user);

WHILE (counter <= 10)

Print num “ X ” counter “ = “ num\*counter;

counter = counter+1;

ENDWHILE

END

1. Write a program that computer the factorial of number (n!).

PROGRAM findFactorial;

Read num;

fac = 1;

if(num = 0)

THEN Print fac;

ELSE

While(num>=1)

fac = fac\*num;

num = num – 1;

ENDWHILE

Print fac;

ENDIF

END

1. Write a program that checks whether a number is prime or not.

PROGRAM isPrime;

Read num;

isPrime = true;

div = num/2;

IF(num < 2)

THEN isPrime = false;

ELSEIF (num>2)

THEN

WHILE (div <= 2)

IF(num/div gives no remainder)

isPrime = false;

ENDIF

ENDWHILE

ENDIF

ENDIF

IF (isPrime = true)

THEN Print “Prime number”

ELSE Print “Not a Prime number”

ENDIF

END

1. Write a program that checks whether the triangle is equilateral, isosceles or scalene triangle .

* In a Scalene triangle, all sides of a triangle or of different length
* In a Isosceles triangle, two sides of a triangle or of same measure.
* In a Equilateral triangle, all sides of a triangle or of equal length

PROGRAM checkTriangle:

Read s1;

Read s2;

Read s3;

If(s1 = s2 AND s1 = s3)

THEN Print “Triangle is Equilateral”;

ELSEIF (s1 = s2 OR s1 = s3 OR s2 = s3)

THEN Print “Triangle is Isosceles”;

ELSE Print “Triangle is Scalene”;

ENDIF

ENDIF

END

* Pattern Questions:

1. Prints this Pattern: (using multiple prints and then by loop).

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By using multiple prints

PROGRAM printPattern:

Print “\*”;

Print “\* \*”;

Print “\* \* \*”;

Print “\* \* \* \*”;

Print “\* \* \* \* \*”;

END

By using loops

PROGRAM printPattern:

rows = 5;

n = 1;

while ( n <= 5 )

A = 1;

While (A<=n)

Print “\* ”

A = A+1 ;

ENDWHILE

Move to new Line;

ENDWHILE

END

Bonus Question:

1. Write a function that checks whether the number is palindrom or not

PROGRAM isPalindrom;

Read num;

Rev = 0;

While (num > 0 )

Rem = num % 10 ;

Rev = Rev \* 10 + Rem ;

Num = num/10;

ENDWHILE

IF(Rev = origNum )

THEN Print “The number is a palindrome”;

ELSE Print “The number is not a palindrome”;

ENDIF

END