**LAB8 Answers**

**1-** static int Power(int m, int n)

{

int result = 1;

for (int i = 1; i <= n; i++)

result = result \* m;

return result;

}

int sum = 0;

for (int i = 1; i <= 10; i++)

sum = sum + Power(i, 3);

Console.WriteLine(sum);

Console.ReadLine();

**2-** static double GeometricMean(int[] array)

{

int result = 1;

for (int i = 0; i < array.Length; i++)

result = result \* array[i];

double gm = Math.Pow(result, 1 / Convert.ToDouble(array.Length));

return gm;

}

int[] arr = { 3, 5, 8, 14 };

Console.WriteLine(GeometricMean(arr));

Console.ReadLine();

**3-** static int Factorial(int x)

{

int result = 1;

for (int i = 1; i <= x; i++)

result = result \* i;

return result;

}

static double BinomialCoefficient(int n, int k) {

double result = Factorial(n) / (Factorial(k) \* Factorial(n-k));

return result;

}

Console.Write("Enter n: ");

int n = Convert.ToInt16(Console.ReadLine());

Console.Write("Enter k: ");

int k = Convert.ToInt16(Console.ReadLine());

Console.WriteLine(BinomialCoefficient(n,k));

Console.ReadLine();

**4-** static void printShape()

{

for (int i = 0; i < 5; i++)

{

for (int j = 0; j < 3; j++)

Console.Write("\*");

Console.WriteLine();

}

}

printShape();

Console.ReadLine();

**5-** static double Fahrenheit\_To\_Celsius(double fahrenheit)

{

double celsius = 0.0;

celsius = ((fahrenheit - 32.0) \* 5.0) / 9.0;

return celsius;

}

Console.Write("Enter fahrenheit: ");

int f = Convert.ToInt16(Console.ReadLine());

Console.WriteLine(Fahrenheit\_To\_Celsius(f));

Console.ReadLine();

**6-** static int findTensDigit(int number)

{

number = number % 100;

number = number / 10;

return number;

}

Console.Write("Enter a number: ");

int number = Convert.ToInt32(Console.ReadLine());

if (number < 100 || number > 999)

Console.WriteLine("error");

else

Console.WriteLine(findTensDigit(number));

Console.ReadLine();