Assignment\_1 (C#)

Name : Twinkle Dhake

Questions and Answers :-

1. WAP to Swapping two integer numbers using a third variable.

using System;

namespace Swap

{

class Program

{

static void Main(string[] args)

{

int num1, num2, tmp;

Console.Write("\n Input the First Number : ");

num1 = int.Parse(Console.ReadLine());

Console.Write("\n Input the Second Number : ");

num2 = int.Parse(Console.ReadLine());

tmp = num1;

num1 = num2;

num2 = tmp;

Console.Write("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

Console.Write("\nAfter Swaping : ");

Console.Write("\n First Number : "+num1);

Console.Write("\nSecond Number : "+num2);

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

Console.Read();

}

}

}

Output :-

Input the First Number : 20

Input the Second Number : 24

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After Swaping :

First Number : 24

Second Number : 20

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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2) WAP to Swapping two integer numbers without using a third variable.

using System;

namespace SwapWithoutThirdVariable

{

class Program

{

static void Main(string[] args)

{

int a = 5;

int b = 10;

Console.WriteLine("Value of a is :" + a);

Console.WriteLine("Value of b is :" + b);

a = a + b;

b = a - b;

a = a - b;

Console.WriteLine("\n After Swaping");

Console.WriteLine("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

Console.WriteLine("new value of a :" + a);

Console.WriteLine("new value of b :" + b);

Console.WriteLine("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

Console.ReadLine();

}

}

}

Output :-

Value of a is :5

Value of b is :10

After Swaping

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new value of a :10

new value of b :5

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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3) WAP to find the Volume of Cone, taking input from keyboard. ( Formula: (1/3) πr2h cubic units

using System;

namespace Cone

{

class Program

{

static void Main(string[] args)

{

int r, h,volume;

float pi ;

Console.WriteLine("\nEnter the Radius :");

r = int.Parse(Console.ReadLine());

Console.WriteLine("\nEnter the Height :");

h = int.Parse(Console.ReadLine());

Console.WriteLine("\nEnter the pi :");

pi = float.Parse(Console.ReadLine());

volume = (int)( (pi \* r \* r \* h)/0.3) ;

Console.WriteLine("\n Volume of the Cone is :"+volume);

Console.ReadLine();

}

}

}

Output :-

Enter the Radius : 8

Enter the Height : 18

Enter the pi : 3.14

Volume of the Cone is :1205.7

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4) WAP to find the Surface Area of Cuboid, taking input from keyboard. ( Formula: 2 (length\*width + width\*height + length\*height)

using System;

namespace AreaofCuboid

{

class Program

{

static void Main(string[] args)

{

int length,width,height, f1;

Console.WriteLine("\nEnter the Length of Cuboid :");

length = int.Parse(Console.ReadLine());

Console.WriteLine("\nEnter the Width of Cuboid :");

width = int.Parse(Console.ReadLine());

Console.WriteLine("\nEnter the Height of Cuboid :");

height = int.Parse(Console.ReadLine());

f1 = (int) (2\*(length \* width + width \* height + length \* height)); Console.WriteLine("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");Console.WriteLine("\n Surface of Cuboid is : " + f1);

Console.WriteLine("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

Console.ReadLine();

}

}

}

Output :-

Enter the Length of cuboid : 10

Enter the Width of cuboid : 25

Enter the Height of cuboid : 54

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Surface of Cuboid is : 4280

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5) WAP a program to create one method to calculate the perimeter of the Rectangle by using OOPs concept.

using System;

namespace RectangleOOPs

{

class Program

{

static void Main(string[] args)

{

int num1;

int num2;

Console.Write("Enter First Number : ");

num1 = int.Parse(Console.ReadLine());

Console.Write("Enter Second Number: ");

num2 = Convert.ToInt32(Console.ReadLine());

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

Console.WriteLine("\nPerimeter is :" + perimeter(num1, num2));

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

}

static double perimeter(double num1, double num2)

{

return 2 \* (num1 + num2);

}

}

}

Output :-

Enter First Number : 12

Enter Second Number: 214

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Perimeter is :452

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6) WAP program to display the output of adding, subtracting, multiplying and dividing of two numbers entered by the user.

using System;

namespace Calculate

{

class Program

{

static void Main(string[] args)

{

int m;

int n;

Console.Write("Enter First Number : ");

m = int.Parse(Console.ReadLine());

Console.Write("Enter Second Number: ");

n = int.Parse(Console.ReadLine());

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

Console.WriteLine("\nAddition is :" + add(m, n));

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

Console.WriteLine("\nSubtraction is :" + sub(m, n));

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

Console.WriteLine("\nMultiplication is :" + multi(m, n));

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

Console.WriteLine("\nDivision is :" + div(m, n));

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

}

static int add(int m, int n)

{

return (m + n);

}

static int sub(int m, int n)

{

return (m - n);

}

static int multi(int m, int n)

{

return (m \* n);

}

static int div(int m, int n)

{

return (m / n);

}

}

}

Output :-

Enter first number : 100

Enter second number: 20

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Addition is :120

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Subtraction is :80

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Multiplication is :2000

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Division is :5

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7) WAP program to find the largest of three numbers.

using System;

namespace LargestNumber

{

class Program

{

static void Main(string[] args)

{

int a;

int b;

int c;

int large;

Console.Write("Enter First Number : ");

a = int.Parse(Console.ReadLine());

Console.Write("Enter Second Number: ");

b= int.Parse(Console.ReadLine());

Console.Write("Enter Third Number : ");

c = int.Parse(Console.ReadLine());

if (a > b && a > c)

large = a;

else if (b > a && b > c)

large = b;

else large = c;

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

Console.WriteLine("\nLargest Number is {0}", large);

Console.Write("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ");

Console.ReadLine();

}

}

}

Output :-

Enter First Number : 125

Enter Second Number: 325

Enter Third Number : 652

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Largest Number is 652

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8) WAP program to read roll no, name and marks of three subjects and calculate the total, percentage of marks.

using System;

using System.Collections.Generic;

using System.Text;

namespace Marks

{

class Class3

{

static void Main(string[] args)

{

double rl, phy, chem, ca, total;

double per;

string nm;

Console.Write("Input the Roll Number of the student :");

rl = Convert.ToInt32(Console.ReadLine());

Console.Write("Input the Name of the Student :");

nm = Console.ReadLine();

Console.Write("Input the marks of Physics : ");

phy = Convert.ToInt32(Console.ReadLine());

Console.Write("Input the marks of Chemistry : ");

che = Convert.ToInt32(Console.ReadLine());

Console.Write("Input the marks of Computer Application : ");

ca = Convert.ToInt32(Console.ReadLine());

total = phy + chem + ca; per = total/3.0;

Console.Write("\nRoll No : {0}\nName of Student : {1}\n", rl, nm);

Console.Write("Marks in Physics : {0}\nMarks in Chemistry : {1}\nMarks in Computer Application : {2}\n", phy, chem, ca);

Console.Write("Total Marks = {0}\nPercentage = {1}\n", total, per);

}

}

}