**C# ASSIGNMENT 2**

**Gautham.K**

**CODE : 1**

**using Basic\_Program;**

**using System.Net.Http.Headers;**

**class Demo1**

**{**

**public static void Main(string[] args)**

**{**

**Console.WriteLine("Enter the chicken count");**

**int chicken = Convert.ToInt32(Console.ReadLine());**

**Console.WriteLine("Enter the cow count");**

**int cow = Convert.ToInt32(Console.ReadLine());**

**Console.WriteLine("Enter the pig count");**

**int pig = Convert.ToInt32(Console.ReadLine());**

**Animal1 animal1 = new Animal1(chicken, cow, pig);**

**Console.WriteLine(animal1.count\_legs());**

**}**

**}**

**using System;**

**using System.Collections.Generic;**

**using System.Linq;**

**using System.Text;**

**using System.Threading.Tasks;**

**namespace Basic\_Program**

**{**

**internal class Animal1**

**{**

**private int chickens;**

**private int cows;**

**private int pigs;**

**public Animal1(int chickens, int cows, int pigs)**

**{**

**this.Chickens = chickens;**

**this.Cows = cows;**

**this.Pigs = pigs;**

**}**

**public int Chickens { get => chickens; set => chickens = value; }**

**public int Cows { get => cows; set => cows = value; }**

**public int Pigs { get => pigs; set => pigs = value; }**

**public int count\_legs()**

**{**

**int result = (this.Chickens \* 2) + (this.Cows \* 4) + (this.Pigs \* 4);**

**return result;**

**}**

**}**

**}**

**CODE : 2**

**using Basic\_Program;**

**using System.Net.Http.Headers;**

**class Demo1**

**{**

**public static void Main(string[] args)**

**{**

**Console.WriteLine("Enter the number of wins");**

**int wins = Convert.ToInt32(Console.ReadLine());**

**Console.WriteLine("Enter the number of draws");**

**int draws = Convert.ToInt32(Console.ReadLine());**

**Console.WriteLine("Enter the losses");**

**int losses = Convert.ToInt32(Console.ReadLine());**

**Football football = new Football();**

**Console.WriteLine(football.FootballPoints(wins, draws, losses));**

**}**

**}**

**using System;**

**using System.Collections.Generic;**

**using System.Linq;**

**using System.Text;**

**using System.Threading.Tasks;**

**namespace Basic\_Program**

**{**

**internal class Football**

**{**

**private int wins;**

**private int draws;**

**private int losses;**

**public int Wins { get => wins; set => wins = value; }**

**public int Draws { get => draws; set => draws = value; }**

**public int Losses { get => losses; set => losses = value; }**

**public int FootballPoints(int wins, int draws, int losses)**

**{**

**int result = (wins \* 3) + (draws \* 1) + (losses \* 0);**

**return result;**

**}**

**}**

**}**

**CODE: 3**

**using Basic\_Program;**

**using System.Net.Http.Headers;**

**class Demo1**

**{**

**public static void Main(string[] args)**

**{**

**Console.WriteLine("Enter the prob");**

**double prob = Convert.ToDouble(Console.ReadLine());**

**Console.WriteLine("Enter the prize");**

**int prize = Convert.ToInt32(Console.ReadLine());**

**Console.WriteLine("Enter the pay");**

**int pay = Convert.ToInt32(Console.ReadLine());**

**Gamble gamble = new Gamble();**

**Console.WriteLine(gamble.ProfitableGamble(prob, prize, pay));**

**}**

**}**

**using System;**

**using System.Collections.Generic;**

**using System.Linq;**

**using System.Text;**

**using System.Threading.Tasks;**

**namespace Basic\_Program**

**{**

**internal class Gamble**

**{**

**private double prob;**

**private int prize;**

**private int pay;**

**public double Prob { get => prob; set => prob = value; }**

**public int Prize { get => prize; set => prize = value; }**

**public int Pay { get => pay; set => pay = value; }**

**public bool ProfitableGamble(double prob, int prize, int pay)**

**{**

**if (prob \* prize > pay)**

**{**

**return true;**

**}**

**else**

**{**

**return false;**

**}**

**}**

**}**

**}**

**CODE : 4**

**using Basic\_Program;**

**using System.Net.Http.Headers;**

**class Demo1**

**{**

**public static void Main(string[] args)**

**{**

**Console.WriteLine("Enter the number");**

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

**Box box = new Box();**

**Console.WriteLine("Number os stacked boxes : " + box.StackBoxes(number));**

**}**

**}**

**using System;**

**using System.Collections.Generic;**

**using System.Linq;**

**using System.Text;**

**using System.Threading.Tasks;**

**namespace Basic\_Program**

**{**

**internal class Box**

**{**

**private int number;**

**public int Number { get => number; set => number = value; }**

**public int StackBoxes(int number)**

**{**

**return number \* number;**

**}**

**}**

**}**

**CODE : 5**

**using Basic\_Program;**

**using System.Net.Http.Headers;**

**class Demo1**

**{**

**public static void Main(string[] args)**

**{**

**Console.WriteLine("Enter the age");**

**int age = Convert.ToInt32(Console.ReadLine());**

**Console.WriteLine("Enter the breaktime");**

**bool breaktime = Convert.ToBoolean(Console.ReadLine());**

**Bartender bartender = new Bartender();**

**Console.WriteLine(bartender.ShouldServeDrinks(age, breaktime));**

**}**

**}**

**using System;**

**using System.Collections.Generic;**

**using System.Linq;**

**using System.Text;**

**using System.Threading.Tasks;**

**namespace Basic\_Program**

**{**

**internal class Bartender**

**{**

**private int age;**

**private bool breaktime;**

**public int Age { get => age; set => age = value; }**

**public bool Breaktime { get => breaktime; set => breaktime = value; }**

**public bool ShouldServeDrinks(int age, bool breaktime)**

**{**

**if ((age>= 18) && (breaktime==false))**

**{**

**return true;**

**}**

**else**

**{**

**return false;**

**}**

**}**

**}**

**}**

**CODE : 6**

**using Basic\_Program;**

**using System.Net.Http.Headers;**

**class Demo1**

**{**

**public static void Main(string[] args)**

**{**

**Console.WriteLine("Enter the cup count");**

**int cup = Convert.ToInt32(Console.ReadLine());**

**Coffee coffee = new Coffee();**

**Console.WriteLine("Total Number of cups : " + coffee.TotalCups(cup));**

**}**

**}**

**using System;**

**using System.Collections.Generic;**

**using System.Linq;**

**using System.Text;**

**using System.Threading.Tasks;**

**namespace Basic\_Program**

**{**

**internal class Coffee**

**{**

**private int cups;**

**public int Cups { get => cups; set => cups = value; }**

**public int TotalCups(int cups)**

**{**

**int total\_cups = (cups / 6) + cups;**

**return total\_cups;**

**}**

**}**

**}**

**CODE : 7**

**using Basic\_Program;**

**using System.Net.Http.Headers;**

**class Demo1**

**{**

**public static void Main(string[] args)**

**{**

**Ending ending = new Ending();**

**string[] temp = { "clever", "meek", "hurried", "nice"};**

**ending.AddEnding(temp, "ly");**

**}**

**}**

**using System;**

**using System.Collections.Generic;**

**using System.Linq;**

**using System.Text;**

**using System.Threading.Tasks;**

**namespace Basic\_Program**

**{**

**internal class Ending**

**{**

**public void AddEnding(string[] words, string addon)**

**{**

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

**{**

**words[i] = words[i] + addon;**

**}**

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

**{**

**Console.Write(words[i] + " ");**

**}**

**}**

**}**

**}**

**CODE : 8**

**using Basic\_Program;**

**using System.Net.Http.Headers;**

**class Demo1**

**{**

**public static void Main(string[] args)**

**{**

**Console.WriteLine("Enter the number of switches");**

**int num = Convert.ToInt32(Console.ReadLine());**

**Switch switches = new Switch();**

**Console.WriteLine(switches.PosCom(num));**

**}**

**}**

**using System;**

**using System.Collections.Generic;**

**using System.Linq;**

**using System.Text;**

**using System.Threading.Tasks;**

**namespace Basic\_Program**

**{**

**internal class Switch**

**{**

**public int PosCom(int num)**

**{**

**return (int)Math.Pow(2, num);**

**}**

**}**

**}**