```
//Question-1


using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;


namespace Assignment2
{
   internal class Program
   {
      static void Main(string[] args)
      {
         Employee e1 = new Employee(77, "Rahul Tomar", 50000.00);
         e1.displayData();
      }
   }
   class Employee
   {
      public int id;
      public string name;
      public double salary;


      public Employee(int id, string name, double salary)
```

```
        {
            this.id = id;
            this.name = name;
            this.salary = salary;
        }
        public void displayData()
        {
            Console.WriteLine("id :" + this.id);
            Console.WriteLine("Name :" + this.name);
            Console.WriteLine("Salary :" + this.salary);
            Console.ReadKey();
        }
    }
}

//Question-2

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
```

```
internal class Program
{
    static void Main(string[] args)
    {
        Bank b1 = new Bank(3296, "Rahul Tomar", 10000);
        b1.displayData();
    }
}
class Bank
{
    public int AccountNumber;
    public string name;
    public double balance;

    public Bank(int AccountNumber, string name, double balance)
    {
        this.AccountNumber = AccountNumber;
        this.name = name;
        this.balance = balance;
    }
    public void deposit(double balance)
    {
        balance += balance;
    }
    public void withdrawl(double amount)
```

```
        {
            if (amount > balance)
            {
                Console.WriteLine("Insufficinent Balance");
            }
            else
            {
                balance = balance - amount;
            }
        }
        public void displayData()
        {
            Console.WriteLine("AccountNumber:" + this.AccountNumber);
            Console.WriteLine("Name :" + this.name);
            Console.WriteLine("Balance :" + this.balance);
            Console.ReadKey();
        }
    }
}
//Question-3

using System;
using System.Collections.Generic;
using System.Diagnostics.CodeAnalysis;
using System.Linq;
```

```
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
    internal class Program
    {
        static void Main(string[] args)
        {
            float[] nums = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };
            MathHelper.average(nums);
        }
    }

    public static class MathHelper
    {
        static float sum= 0;
        static float avg = 0;
        public static void average(float[] nums)
        {
            for(int i=0;i<nums.Length; i++)
            {
                sum += nums[i];
            }
            avg = sum/nums.Length;
```

```
            Console.WriteLine("Average is " + avg);
            Console.ReadKey();
        }

    }


}

//Question-4

using System;
using System.Collections.Generic;
using System.Diagnostics.CodeAnalysis;
using System.Linq;
using System.Runtime.CompilerServices;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
    internal class Program
    {
        static void Main(string[] args)
        {
```

```
        Logger.setNameAndPassword("Ritik dixit", 8979);
        Logger.Login("Rahul tomar", 8979);

    }
}

public static class Logger
{
    static string name;
    static int password;
    public static void setNameAndPassword(string username ,int userpassword)
    {
        name = username;
        password = userpassword;
    }
    public static void Login(string username ,int userpassword)
    {
        if (username == name && userpassword == password)
        {
            Console.WriteLine("Login SuccessFull");
            Console.ReadKey();
        }
        else
        {
            Console.WriteLine("Login Failed");
```

```
            Console.ReadKey();
        }
    }
  }

}

//Question-5

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
  public partial class Person
  {
    public string firstName;
    public string lastName;
    public Person(string firstName, string lastName)
    {
      this.firstName = firstName;
      this.lastName = lastName;
```

```
        }


    }
}

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
    public partial class Person
    {
        public void showDetails() {

            Console.WriteLine("FirstName :" +firstName+ "LastName :" + lastName);
            Console.ReadKey();
        }
    }
}



using System;
```

```
using System.Collections.Generic;
using System.Diagnostics.CodeAnalysis;
using System.Linq;
using System.Runtime.CompilerServices;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
   internal class Program
   {
      static void Main(string[] args)
      {
         Person p1 = new Person("Rahul", "tomar");
         p1.showDetails();

      }

   }

}

//Question-6

using System;
```

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
    public partial class Employee
    {
        public int id;
        public string name;
        public double salary;

        public Employee(int id, string name, double salary)
        {
            this.id = id;
            this.name = name;
            this.salary = salary;
        }

    }
}

using System;
using System.Collections.Generic;
```

```
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
   public partial class Employee
   {

      public void displayData()
      {
         Console.WriteLine("id :" + this.id);
         Console.WriteLine("Name :" + this.name);
         Console.WriteLine("Salary :" + this.salary);
         Console.ReadKey();
      }
   }
}

using System;
using System.Collections.Generic;
using System.Diagnostics.CodeAnalysis;
using System.Linq;
using System.Runtime.CompilerServices;
using System.Text;
```

```
using System.Threading.Tasks;


namespace Assignment2
{
   internal class Program
   {
      static void Main(string[] args)
      {
         Employee e1 = new Employee(77, "Rahul tomar", 10000);
         e1.displayData();
      }


   }


}


//Question-7


using System;
using System.Collections.Generic;
using System.Diagnostics.CodeAnalysis;
using System.Linq;
using System.Runtime.CompilerServices;
using System.Text;
using System.Threading.Tasks;
```

```
namespace Assignment2
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Circle c1 = new Circle();
            c1.setRadius(5);
            c1.getarea();
        }


    }

    public abstract class Shape
    {
        public abstract void getarea();
    }
    public class Circle : Shape
    {
        float radius;
        public void setRadius( float r)
        {
            radius = r;
        }
```

```
        public override void getarea()
        {
            double area = 3.14 * radius * radius;
            Console.WriteLine("Area is :" + area);
            Console.ReadKey();
        }
    }
}

//Question-8

using System;
using System.Collections.Generic;
using System.Diagnostics.CodeAnalysis;
using System.Linq;
using System.Runtime.CompilerServices;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
    internal class Program
    {
        static void Main(string[] args)
        {
```

```
        Dog d1 = new Dog();
        Cat c1 = new Cat();
        d1.Sound("WOW WOW");
        c1.Sound("MEOW MEOW");
    }

}

public abstract class Animal
{
    public abstract void Sound(string sound);
}
public class Dog : Animal
{
    public override void Sound(string sound)
    {
        Console.WriteLine("Dog sound " + sound);
        Console.ReadKey();
    }
}
public class Cat: Animal
{
    public override void Sound(string sound)
    {
        Console.WriteLine("Cat Sound " + sound);
```

```
            Console.ReadKey();
        }

    }

}
```

//Question-9

```
using System;
using System.Collections.Generic;
using System.Diagnostics.CodeAnalysis;
using System.Linq;
using System.Runtime.CompilerServices;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
```

```
internal class Program
{
    static void Main(string[] args)
    {
        Car Audi = new Car("bmw");


    }


}


public sealed class Vechile
{
    string vechile;
    public void startEngine(string vechile)
    {
        this.vechile = vechile;
        Console.WriteLine(vechile + " is start");
    }
    public void stopEngine()
    {


        Console.WriteLine(vechile + "is stop");
    }
}
```

```
    public class Car : Vechile
    {
        string name;
        public Car(string name)
        {
            this.name = name;
        }
    }

}

//Question-10

using System;
using System.Collections.Generic;
using System.Diagnostics.CodeAnalysis;
using System.Linq;
using System.Runtime.CompilerServices;
using System.Text;
using System.Threading.Tasks;

namespace Assignment2
{
    internal class Program
    {
```

```
static void Main(string[] args)
{



}

 sealed class Bank
{
    public int AccountNumber;
    public string name;
    public double balance;

    public Bank(int AccountNumber, string name, double balance)
    {
        this.AccountNumber = AccountNumber;
        this.name = name;
        this.balance = balance;
    }
    public void deposit(double balance)
    {
        balance += balance;
    }
    public void withdrawl(double amount)
    {
        if (amount > balance)
```

```
            {
                Console.WriteLine("Insufficinent Balance");
            }
            else
            {
                balance = balance - amount;
            }
        }
        public void displayData()
        {
            Console.WriteLine("AccountNumber:" + this.AccountNumber);
            Console.WriteLine("Name :" + this.name);
            Console.WriteLine("Balance :" + this.balance);
            Console.ReadKey();
        }
    }
    class SavingAccount : Bank
    {
        public int AccountNumber;
        public string name;

    }
  }

}
```