

## DAY7 MORNNING ASSIGNMENT

BY

ANDE MANOHAR

1ST FEB 2022

Q1.Create Employees class with three variables and two methods ReadEmployees and printemployee and create an object and call methods

Code:

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

namespace DAY7__morning_project1
{
    //*****
    //Author: ANDE MANOHAR
    //Purpose : To create Employee class with three variables and two methods
    //*****

    class Employees
    {
        private int Id;
        private string Name;
        private int Salary;
        public void ReadEmployee()
        {
            Console.WriteLine("Enter Id");
            Id = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Enter Name");
            Name = Console.ReadLine();
            Console.WriteLine("Enter salary");
            Salary = Convert.ToInt32(Console.ReadLine());
        }
        public void printEmployee()
        {
            Console.WriteLine($"Id = {Id},Name={Name},Salary={Salary}");
        }
    }

    internal class Program
    {
        static void Main(string[] args)
        {
            Employees Emp1 = new Employees();
            Employees Emp2 = new Employees();

            Emp1.ReadEmployee();
```

```

        Emp2.ReadEmployee();

        Emp1.printEmployee();
        Emp2.printEmployee();

        Console.ReadLine();

    }

}

```

Output:

```

Enter Id
105
Enter Name
Manohar
Enter salary
12000
Enter Id
106
Enter Name
shiva
Enter salary
15000
Id = 105, Name=Manohar, Salary=12000
Id = 106, Name=shiva, Salary=15000

```

**Q2. Write 3 definitions of class and 4 points about object discussed in class**

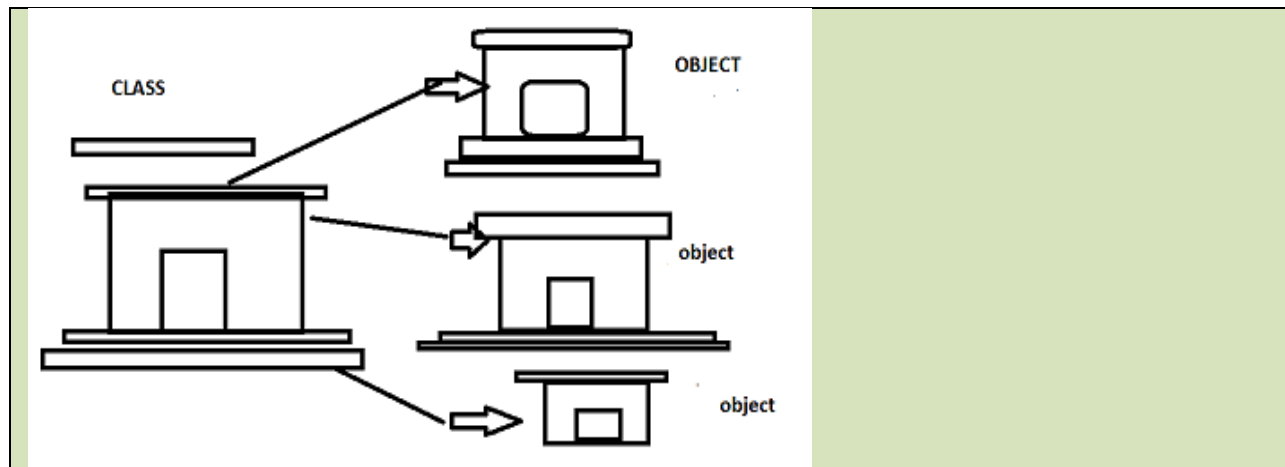
**Class Defination:**

1. A class is group of variables and Methods
2. A class is like Design or blue print to create an object
3. A class consists of state (Variables) and Behaviour (Methods)

**Points on object:**

1. An object is instance of a class
2. We can create any number of objects
3. Objects occupy memory
4. Objects are reference type

**Q3. Pictorial represenation of Class and Multiple objects**



Q4. Create below classes

Code: class product:

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

namespace DAY7__product
{
    //*****
    //Author: ANDE MANOHAR
    //Purpose : To create Product class with three variables and two methods
    //*****
    class Product
    {
        private int price;
        private string brand;
        private string colour;
        public void ReadProduct()
        {
            Console.WriteLine("Enter price");
            price = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Enter brand");
            brand = Console.ReadLine();
            Console.WriteLine("Enter colour");
            colour = Console.ReadLine();
        }
        public void Printproduct()
        {
            Console.WriteLine($"price{price},brand{brand}colour{colour}");
        }
    }
}
```

```

internal class Program
{
    static void Main(string[] args)
    {
        Product p1 = new Product();
        Product p2 = new Product();

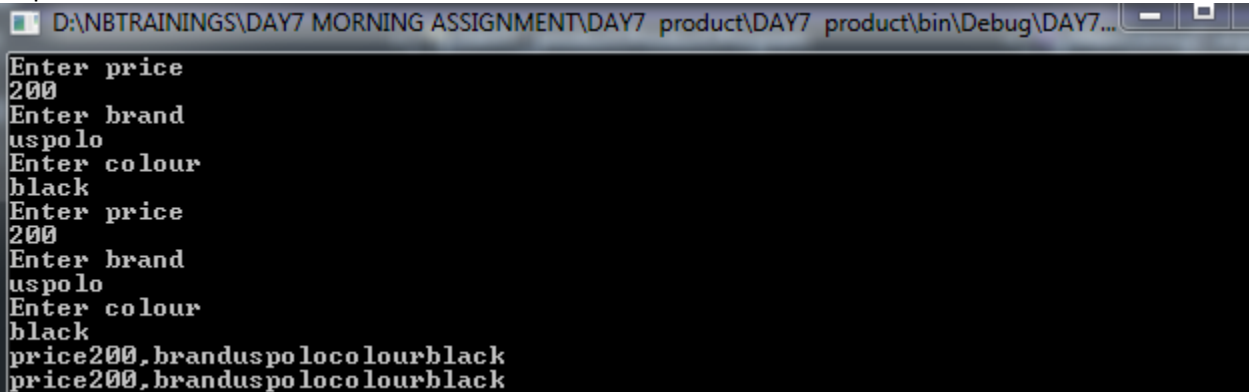
        p1.ReadProduct();
        p2.ReadProduct();

        p1.Printproduct();
        p2.Printproduct();

        Console.ReadLine();
    }
}

```

Output:



```

Enter price
200
Enter brand
uspolo
Enter colour
black
Enter price
200
Enter brand
uspolo
Enter colour
black
price200,branduspolo colourblack
price200,branduspolo colourblack

```

Class customer:

Code:

```

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

namespace DAY7_Morning_project2
{
    //*****
    //Author: ANDE MANOHAR

```

//Purpose : To create Customer class with three variables and two methods

//\*\*\*\*\*

```
class customer
{
    private string username;
    private string password;
    private string email;
    public void Readcustomer()
    {
        Console.WriteLine("Enter username :");
        username = Console.ReadLine();
        Console.WriteLine("Enter password:");
        password = Console.ReadLine();
        Console.WriteLine("Enter email :");
        email = Console.ReadLine();

    }
    public void Printcustomer()
    {
        Console.WriteLine($"username={username},password={password},email={email}:");
    }
}
internal class Program
{
    static void Main(string[] args)
    {
        customer Cust1 = new customer();
        customer Cust2 = new customer();

        Cust1.Readcustomer();
        Cust2.Readcustomer();

        Cust1.Printcustomer();
        Cust2.Printcustomer();

        Console.ReadLine();

    }
}
```

Output:

```
D:\NBTRAININGS\DAY7 MORNING ASSIGNMENT\DAY7 Morning project2\DAY7 Morning project2...
Enter username :
sonu
Enter password:
sonu123
Enter email :
sonu2gmail.com
Enter username :
sonu
Enter password:
sonu123
Enter email :
sonu@gmail.com
username=sonu,password=sonu123,email=sonu2gmail.com:
username=sonu,password=sonu123,email=sonu@gmail.com:
```

### Class seller

Code:

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

namespace DAY7_class_seller
{
    //*****
    //Author: ANDE MANOHAR
    //Purpose : To create seller class with three variables and two methods
    //*****
    class seller
    {
        private string name;
        private string email;
        private int mobile;
        public void Readseller()
        {
            Console.WriteLine("Enter sellername :");
            name = Console.ReadLine();
            Console.WriteLine("Enter email:");
            email = Console.ReadLine();
            Console.WriteLine("Enter mobile number :");
            mobile = Convert.ToInt32(Console.ReadLine());
        }
        public void Printseller()
        {
            Console.WriteLine($"name={name},email={email},mobile={mobile}");
        }
    }
    internal class Program
    {
```

```

static void Main(string[] args)
{
    seller s1 = new seller();
    seller s2 = new seller();

    s1.Readseller();
    s2.Readseller();

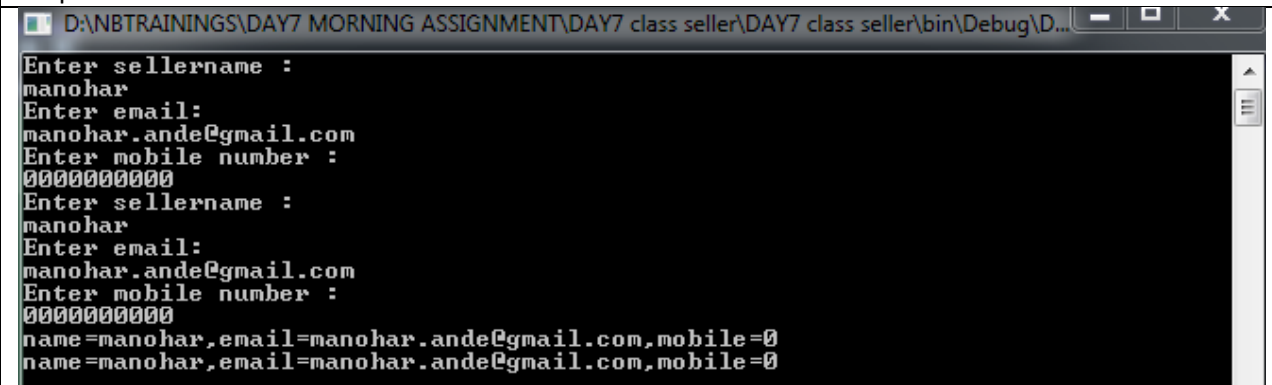
    s1.Printseller();
    s2.Printseller();

    Console.ReadLine();

}
}
}
}

```

Output:



```

D:\NBTRAININGS\DAY7 MORNING ASSIGNMENT\DAY7 class seller\DAY7 class seller\bin\Debug\D...
Enter sellername :
manohar
Enter email:
manohar.and@gmail.com
Enter mobile number :
0000000000
Enter sellername :
manohar
Enter email:
manohar.and@gmail.com
Enter mobile number :
0000000000
name=manohar,email=manohar.and@gmail.com,mobile=0
name=manohar,email=manohar.and@gmail.com,mobile=0

```

## Class department

Code:

```

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

namespace Day7_Department_project
{
    //*****
    //Author: ANDE MANOHAR
    //Purpose : To create Department class with three variables and two methods
    //*****
    class department
    {
        private string dealername;
    }
}

```

```

private string email;
private int mobile;
public void Readdepartment()
{
    Console.WriteLine("Enter dealername :");
    dealername = Console.ReadLine();
    Console.WriteLine("Enter email:");
    email = Console.ReadLine();
    Console.WriteLine("Enter mobile number :");
    mobile = Convert.ToInt32(Console.ReadLine());
}
public void Printdepartment()
{
    Console.WriteLine($"dealername={dealername},email={email},mobile={mobile}");

}

internal class Program
{
    static void Main(string[] args)
    {
        department d1 = new department();
        department d2 = new department();

        d1.Readdepartment();
        d2.Readdepartment();

        d1.Printdepartment();
        d2.Printdepartment();

        Console.ReadLine();

    }
}

```

Output:



```
D:\NBTRAININGS\DAY7 MORNING ASSIGNMENT\Day7 Department project\Day7 Department pr...
Enter dealername :
kiran
Enter email:
kiran@gmail.com
Enter mobile number :
0000000000
Enter dealername :
kiran
Enter email:
kiran@gmail.com
Enter mobile number :
0000000000
dealername=kiran,email=kiran@gmail.com,mobile=0
dealername=kiran,email=kiran@gmail.com,mobile=0
```

Q.5 Create Employee class with 3 public variables

Create employee object while creating object and print the values

Code:

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

namespace Day7_object_initialization_project
{
    //*****
    //Author: ANDE MANOHAR
    //Purpose : To create Employee class with three public variables and creating object
    //*****
    class Employee
    {
        public int id;
        public string name;
        public int salary;
    }

    internal class Program
    {
        static void Main(string[] args)
        {
            Employee emp = new Employee() { id = 2, name = "manohar", salary = 50000 };
            Console.WriteLine($"id ={emp. id},name ={emp.name} salary={emp .salary}");
            Console.ReadLine();
        }
    }
}
```

Output:

```
D:\NB\TRAININGS\DAY7 MORNING ASSIGNMENT
id =2,name =manohar salary=50000
```

Q6.Create Employees class as shown below

Class Employees

```
{
Public int id;
Public string name;
Public int salary;
}
```

Now create employees array object and initialize with 5 employees

Write code using

a.for loop

b.for each loop

c.lamda expression

Code:

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

//*****
//Author: ANDE MANOHAR
//Purpose : To create Employee class array and initializing 5 employees
//*****

namespace DAY_7_Employees_using_public
{
    class Employees
    {
        public int id;
        public string name;
        public int salary;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            Employees[] employees = new Employees[]
            {
                new Employees (){id=1,name = "Manohar",salary = 5000},
                new Employees (){id=2,name = "Mohan",salary = 6000},
            }
        }
    }
}
```

```

        new Employees (){id=3,name = "Ramu",salary = 7000},
        new Employees (){id=4,name = "krishna",salary = 9000},
        new Employees (){id=5,name = "Kiran",salary = 10000},
    };
    //for loop
    for (int i = 0; i < employees.Length; i++)
        Console.WriteLine($" id={employees[i].id},Name={employees[i].name},salary={employees[i].salary}");
    //foreach loop
    foreach(var e in employees)
    {
        Console.WriteLine($"id ={e.id},Name={e.name},salary={e.salary}");
    }
    //Lambda expression
    employees.ToList().ForEach(e => Console.WriteLine($"id = {e.id},Nmae={e.name},salary={e.salary}"));

    Console.ReadLine();
}
}
}

```

Output:

```

D:\NBTRAININGS\DAY7 MORNING ASSIGNMENT\DAY 7 Employees using public\DAY 7 Employee...
id=1,Name=Manohar,salary=5000
id=2,Name=Mohan,salary=6000
id=3,Name=Ramu,salary=7000
id=4,Name=krishna,salary=9000
id=5,Name=Kiran,salary=10000
id =1,Name=Manohar,salary=5000
id =2,Name=Mohan,salary=6000
id =3,Name=Ramu,salary=7000
id =4,Name=krishna,salary=9000
id =5,Name=Kiran,salary=10000
id = 1,Nmae=Manohar,salary=5000
id = 2,Nmae=Mohan,salary=6000
id = 3,Nmae=Ramu,salary=7000
id = 4,Nmae=krishna,salary=9000
id = 5,Nmae=Kiran,salary=10000

```

Q7. For the above project,write code tto print employees who is getting salry >=5000 using

- for loop
- foreach
- lambda expression

Code:

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace DAY7_Employees_5000_salary
{

```

```

class Employees
{
    public int id;
    public string name;
    public int salary;
}

internal class Program
{
    static void Main(string[] args)
    {
        Employees[] employees = new Employees[]
        {
            new Employees () {id=1,name = "Manohar",salary = 5000},
            new Employees () {id=2,name = "Mohan",salary = 6000},
            new Employees () {id=3,name = "Ramu",salary = 7000},
            new Employees () {id=4,name = "krishna",salary = 2000},
            new Employees () {id=5,name = "Kiran",salary = 10000},
        };
        //for loop
        for (int i = 0; i < employees.Length; i++)
        {
            if (employees[i].salary >= 5000)
                Console.WriteLine($"
id={employees[i].id},Name={employees[i].name},salary={employees[i].salary}");
        }
        //foreach loop
        foreach (var e in employees)
        {
            if(e.salary>=5000)
                Console.WriteLine($"id = {e.id},Name={e.name},salary={e.salary}");
        }
        //Lambda expression

        employees.ToList().Where(e=>e.salary>=5000).ToList().ForEach(e => Console.WriteLine($"id =
{e.id},Name={e.name},salary={e.salary}"));

        Console.ReadLine();

    }
}

```

Output:

```
D:\NBTRAININGS\DAY7 MORNING ASSIGNMENT\DAY7 Employees 5000 salary\DAY7 Employees 5...
id=1,Name=Manohar,salary=5000
id=2,Name=Mohan,salary=6000
id=3,Name=Ramu,salary=7000
id=5,Name=Kiran,salary=10000
id =1,Name=Manohar,salary=5000
id =2,Name=Mohan,salary=6000
id =3,Name=Ramu,salary=7000
id =5,Name=Kiran,salary=10000
id = 1,Nmae=Manohar,salary=5000
id = 2,Nmae=Mohan,salary=6000
id = 3,Nmae=Ramu,salary=7000
id = 5,Nmae=Kiran,salary=10000
```

Q8.Similar to 6 and 7 projects create list of customers and product Arrays and practice for for loop,foreach,and lambda expressions

#### Code for class customers:

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

namespace DAY7_Customer_class_using_lambda
{
    class Customers
    {
        public int id;
        public string name;
        public int age;
    }

    internal class Program
    {
        static void Main(string[] args)
        {
            Customers [] customers = new Customers[]
            {
                new Customers (){id=1,name = "Manohar",age = 20},
                new Customers (){id=2,name = "Mohan",age = 15},
                new Customers (){id=3,name = "Ramu",age = 18},
                new Customers (){id=4,name = "krishna",age = 25},
                new Customers (){id=5,name = "Kiran",age = 28},
            };
            //for loop
            for (int i = 0; i < customers.Length; i++)
                Console.WriteLine($" id={customers[i].id},Name={customers[i].name},age={customers[i].age}");
            //foreach loop
            foreach (var e in customers)
            {
```

```

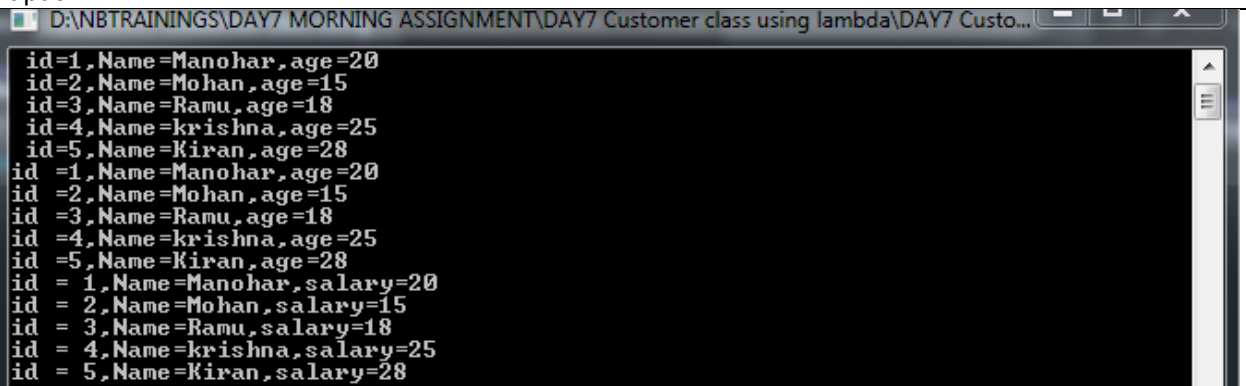
        Console.WriteLine($"id={e.id},Name={e.name},age={e.age}");
    }
    //Lambda expression
    customers.ToList().ForEach(e => Console.WriteLine($"id={e.id},Name={e.name},salary={e.age}"));

    Console.ReadLine();

}
}
}

```

Ouput:



```

D:\NBTRAININGS\DAY7 MORNING ASSIGNMENT\DAY7 Customer class using lambda\DAY7 Custo...
id=1,Name=Manohar,age=20
id=2,Name=Mohan,age=15
id=3,Name=Ramu,age=18
id=4,Name=krishna,age=25
id=5,Name=Kiran,age=28
id =1,Name=Manohar,age=20
id =2,Name=Mohan,age=15
id =3,Name=Ramu,age=18
id =4,Name=krishna,age=25
id =5,Name=Kiran,age=28
id = 1,Name=Manohar,salary=20
id = 2,Name=Mohan,salary=15
id = 3,Name=Ramu,salary=18
id = 4,Name=krishna,salary=25
id = 5,Name=Kiran,salary=28

```

Q8b. write code to print class customers whose age >=20 using forloop,foreach,and lambda expressions

Code:

```

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

namespace DAY7_customer_project2
{
    class Customers
    {
        public int id;
        public string name;
        public int age;
    }

    internal class Program
    {
        static void Main(string[] args)
        {
            Customers[] customers = new Customers[]

```

```

    {
        new Customers () {id=1,name = "Manohar",age = 20},
        new Customers () {id=2,name = "Mohan",age = 15},
        new Customers () {id=3,name = "Ramu",age = 18},
        new Customers () {id=4,name = "krishna",age = 25},
        new Customers () {id=5,name = "Kiran",age = 28},
    };
    //for loop

    for (int i = 0; i < customers.Length; i++)
    if (customers[i].age >= 20)
        Console.WriteLine($"id={customers[i].id},Name={customers[i].name},age={customers[i].age}");
    //foreach loop
    foreach (var e in customers)
    if (e.age >= 20)

    {
        Console.WriteLine($"id = {e.id},Name={e.name},age={e.age}");
    }
    //Lambda expression
    customers.ToList().Where(e => e.age >= 20).ToList().ForEach(e => Console.WriteLine($"id =
    {e.id},Name={e.name},age={e.age}"));

    Console.ReadLine();

}
}
}

```

Output:

```

id=1, Name=Manohar, age=20
id=4, Name=krishna, age=25
id=5, Name=Kiran, age=28
id =1, Name=Manohar, age=20
id =4, Name=krishna, age=25
id =5, Name=Kiran, age=28
id = 1, Name=Manohar, age=20
id = 4, Name=krishna, age=25
id = 5, Name=Kiran, age=28

```

#### Q8C. Class product

Code:

```

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

```

```

using System.Threading.Tasks;

namespace Day7_product_class_using_lamda
{
    class Product
    {
        public int id;
        public string name;
        public int price;
    }

    internal class Program
    {
        static void Main(string[] args)
        {
            Product[] product = new Product[]
            {
                new Product () {id=1,name = "uspolo" , price = 1000},
                new Product () {id=2,name = "puma",price = 1500},
                new Product () {id=3,name = "Nike",price = 1800},
                new Product () {id=4,name = "UCB",price = 2500},
                new Product () {id=5,name = "levis",price = 2800},
            };
            //for loop
            for (int i = 0; i < product.Length; i++)
                Console.WriteLine($" id={product[i].id},Name={product[i].name},price={product[i].price}");
            //foreach loop
            foreach (var e in product)
            {
                Console.WriteLine($"id = {e.id},Name={e.name},price={e.price}");
            }
            //Lambda expression
            product.ToList().ForEach(e => Console.WriteLine($"id = {e.id},Name={e.name},price={e.price}"));

            Console.ReadLine();

        }
    }
}

```

Output:



```
D:\NBTRAININGS\DAY7 MORNING ASSIGNMENT\Day7 product class using lamda\Day7 product cl...
id=1,Name=uspolo,price=1000
id=2,Name=puma,price=1500
id=3,Name=Nike,price=1800
id=4,Name=UCB,price=2500
id=5,Name=levis,price=2800
id =1,Name=uspolo,price=1000
id =2,Name=puma,price=1500
id =3,Name=Nike,price=1800
id =4,Name=UCB,price=2500
id =5,Name=levis,price=2800
id = 1,Name=uspolo,price=1000
id = 2,Name=puma,price=1500
id = 3,Name=Nike,price=1800
id = 4,Name=UCB,price=2500
id = 5,Name=levis,price=2800
```

Q8D . write code to print class PRODUCT whose price  $\geq 2000$  using forloop,foreach,and lambda expressions

Code:

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

namespace DAY7_product_class2
{
    class Product
    {
        public int id;
        public string name;
        public int price;
    }

    internal class Program
    {
        static void Main(string[] args)
        {
            Product[] product = new Product[]
            {
                new Product {id=1,name = "uspolo", price = 1000},
                new Product {id=2,name = "puma",price = 1500},
                new Product {id=3,name = "Nike",price = 1800},
                new Product {id=4,name = "UCB",price = 2500},
                new Product {id=5,name = "levis",price = 2800},
            };
            //for loop
            for (int i = 0; i < product.Length; i++)
            {
                if (product[i].price >= 1800)
                {
                    Console.WriteLine($" id={product[i].id},Name={product[i].name},price={product[i].price}");
                }
            }
            //foreach loop
        }
    }
}
```

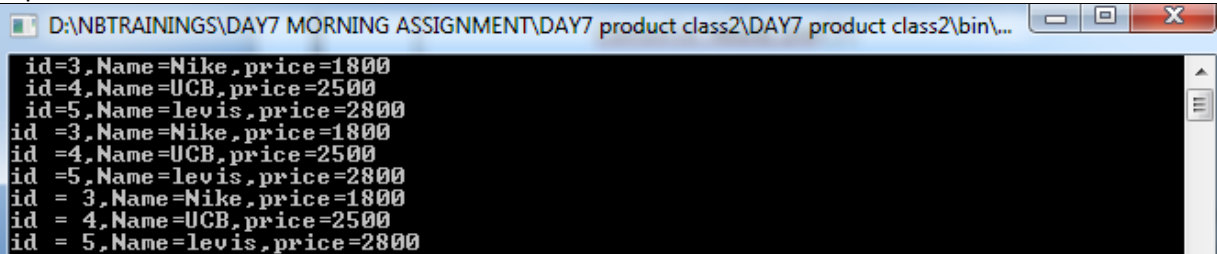
```
foreach (var e in product)
    if (e.price >= 1800)
    {
        Console.WriteLine($"id={e.id},Name={e.name},price={e.price}");
    }
//Lambda expression

product.ToList().Where(e => e.price >= 1800).ToList().ForEach(e => Console.WriteLine($"id =
{e.id},Name={e.name},price={e.price}"));

Console.ReadLine();

}
}
```

Output:



```
D:\NBTRAININGS\DAY7 MORNING ASSIGNMENT\DAY7 product class2\DAY7 product class2\bin\...
id=3,Name=Nike,price=1800
id=4,Name=UCB,price=2500
id=5,Name=levis,price=2800
id =3,Name=Nike,price=1800
id =4,Name=UCB,price=2500
id =5,Name=levis,price=2800
id = 3,Name=Nike,price=1800
id = 4,Name=UCB,price=2500
id = 5,Name=levis,price=2800
```