DAY 7 MORNING ASSIGNMENT (01/02/2022)

BY SARATH PHANI KASIMSETTY

1) Create Employee class with three variables and two methods RaedEmployee 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 Day7MorningProject1
{
    internal class Employee   //class of employee
    {
        // private variables
        private int id;
        private string name;
        private int age;
        private int salary;

        // public methods dealswith variables
        public void ReadEmployee() //read values from user
        {
            Console.WriteLine("Enter the EmpId :");
            id = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter the Name :");
            name= Console.ReadLine();

            Console.WriteLine("Enter the Age :");
            age= Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter the Salary :");
            salary = Convert.ToInt32(Console.ReadLine());
        }

        public void printEmployee() //pint employee details of function call
        {
            Console.WriteLine("EmpID : {0}, Name : {1}, Age : {2}, Salary : {3}", id,
name, age, salary);

        }

    }
    internal class Program
    {
```

```
        static void Main(string[] args)
        {
            Employee emp1 = new Employee(); //read values from user
            emp1.ReadEmployee();
            emp1.printEmployee();

            Console.ReadLine();
        }
    }
}
```

OUTPUT:

```
Enter the EmpId :
155
Enter the Name :
SARATH
Enter the Age :
25
Enter the Salary :
15000
EmpID : 155, Name : SARATH, Age : 25, Salary : 15000
```

2) Write the point about class and object discussed in the class.

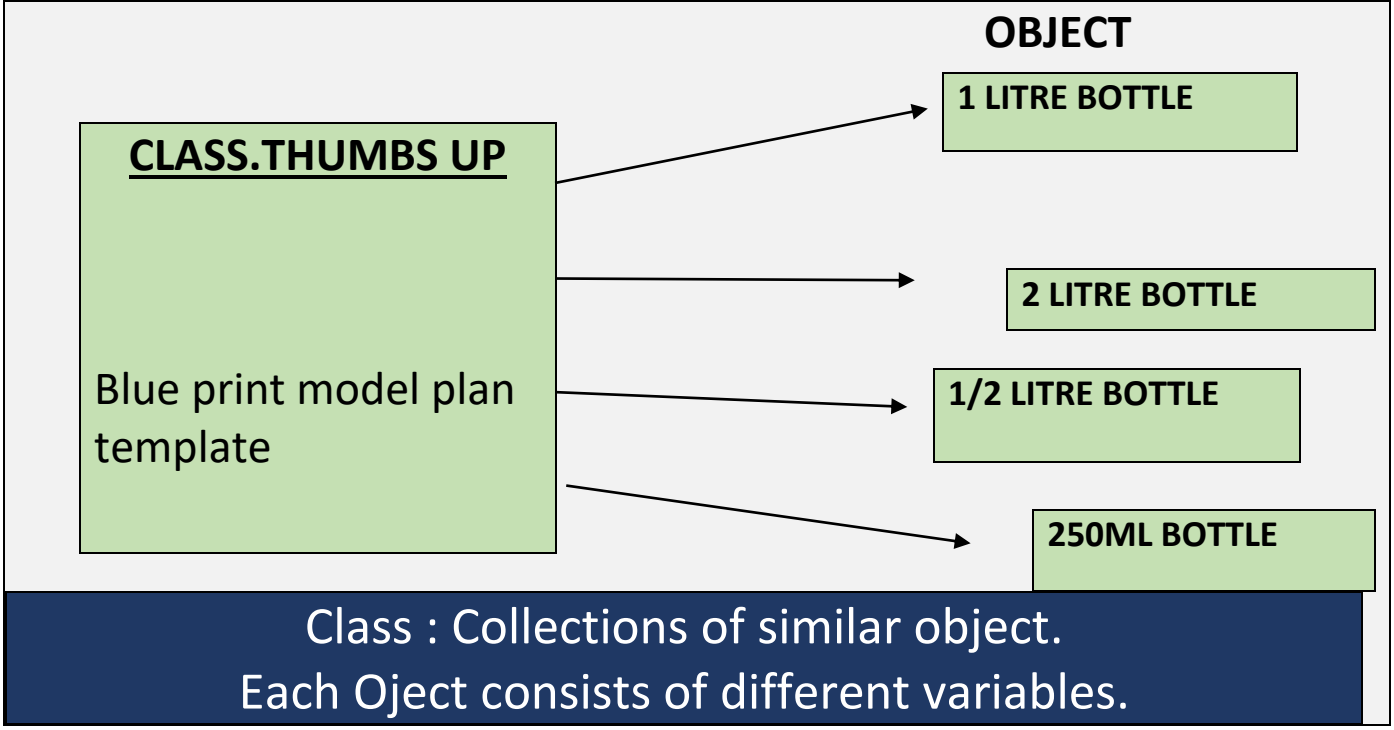
Class:

- Class is group of variable and method.
- Class is like a design to create a object.
- A class consists of state(variable) and behavior(method).

Objects:

- An object is an instance of a class.
- We can create any number of objects.
- Objects occupy memory.
- Object are reference type.

3) Pictorially represents class and object.

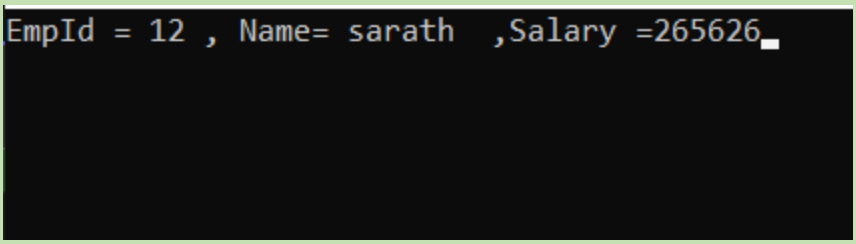


5) Create Employee object and initialize with values while creating object abs print the values.

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
// sarath kasimsetty
//Create Employee object and initialize with values while creating object and
print the values.
namespace Day7MorningProject5
{
    internal class Employee
    {
        public int Id;
        public string Name;
        public int Salary;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            Employee emp = new Employee() { Id = 12, Name = "sarath", Salary =
265626 };

            Console.WriteLine("EmpId = {0} ,Name= {1} ,Salary ={2}", emp.Id,
emp.Name, emp.Salary);
            Console.ReadLine();

        }
    }
}
```

OUTPUT:



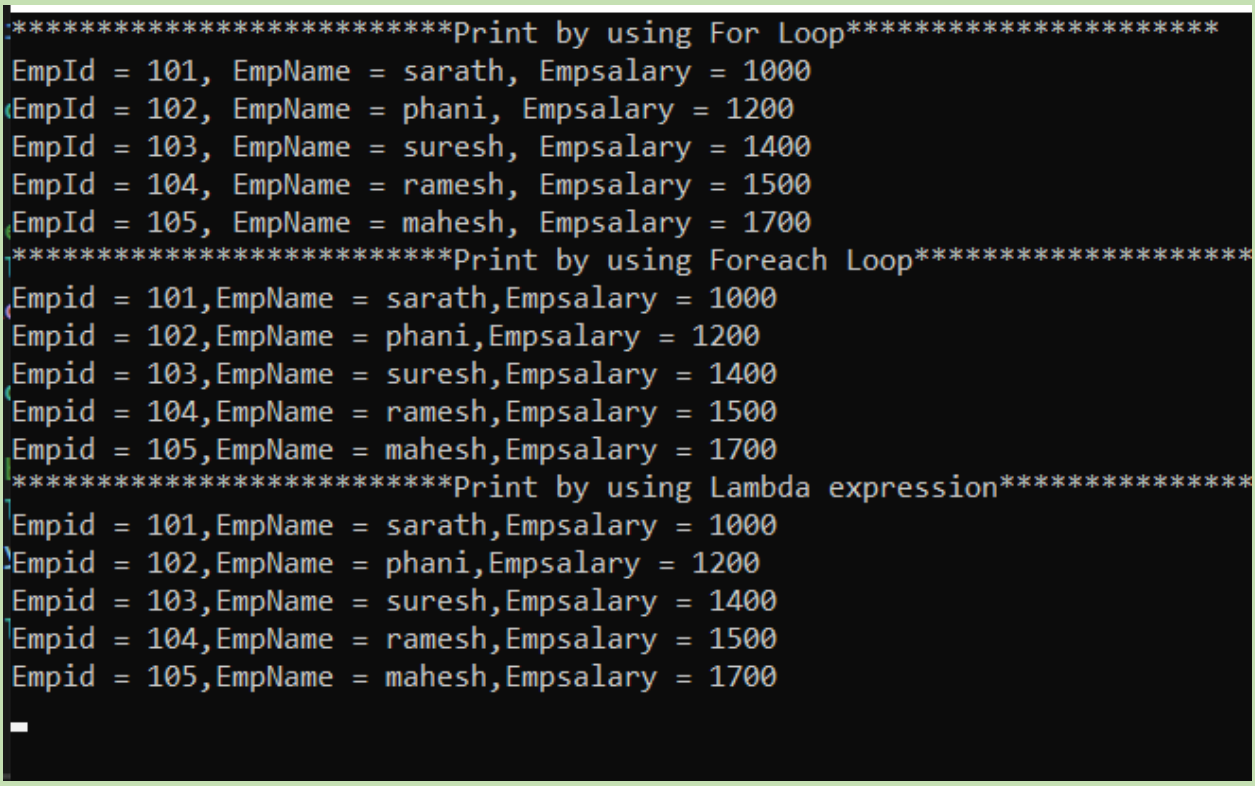
6) create employees array object and initialize with 5 employees write code using for loop ,for loop ,lambda expression.

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//sarath kasimsetty
//create employees array object and initialize with 5 employees
//write code using for loop,for loop ,lambda expression.
namespace Day7MorningProject6
{
    internal class Employee
    {
        public int Id;
        public string Name;
        public int salary;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            Employee[] employees = new Employee[]
            {
                new Employee(){Id = 101, Name = "sarath", salary=1000},
                new Employee(){Id = 102, Name = "phani" , salary=1200},
                new Employee(){Id = 103, Name = "suresh", salary=1400},
                new Employee(){Id = 104, Name = "ramesh", salary=1500},
                new Employee(){Id = 105, Name = "mahesh", salary=1700}
            };

            //forloop
            Console.WriteLine("**************************Print by using For
Loop**********************");
            for (int i=0;i<employees.Length;i++)
            {
                Console.WriteLine($"EmpId = {employees[i].Id}, EmpName =
{employees[i].Name}, Empsalary = {employees[i].salary}");
            }

            //foreach loop
            Console.WriteLine("**************************Print by using Foreach
Loop**********************");
            foreach (var d in employees)
            {
                Console.WriteLine("Empid = {0},EmpName = {1},Empsalary =
{2}",d.Id,d.Name,d.salary);
            }
            //lambda expression
```

```
            Console.WriteLine("**************************Print by using Lambda
expression**********************");
            employees.ToList().ForEach(e => Console.WriteLine("Empid = {0},EmpName =
{1},Empsalary = {2}", e.Id, e.Name, e.salary));

            Console.ReadLine();
        }
    }
}
```

OUTPUT



7) Write code to print employees who is getting salary >=1500 using for loop, for each loop, lambda expression.

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//sarath kasimsetty
// write code to print employees who is getting salary >=1500 using
// for loop,foreach loop,lambda expression

namespace Day7MorningProject7
{
    internal class Employee
    {
        public int Id;
        public string Name;
        public int salary;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            Employee[] employees = new Employee[]
            {
                new Employee(){Id = 101, Name = "sarath", salary=1000},
                new Employee(){Id = 102, Name = "phani" , salary=1200},
                new Employee(){Id = 103, Name = "suresh", salary=1400},
                new Employee(){Id = 104, Name = "ramesh", salary=1500},
                new Employee(){Id = 105, Name = "mahesh", salary=1700}
            };

            //forloop
            Console.WriteLine("**************************Print by using For
Loop**********************");
            for (int i = 0; i < employees.Length; i++)
            {
                if (employees[i].salary >= 1500)
                    Console.WriteLine($"EmpId = {employees[i].Id}, EmpName =
{employees[i].Name}, Empsalary = {employees[i].salary}");
            }

            //foreach loop
            Console.WriteLine("**************************Print by using Foreach
Loop**********************");
            foreach (var d in employees)
            {
                if (d.salary >= 1500)
                    Console.WriteLine("Empid = {0},EmpName = {1},Empsalary = {2}", d.Id,
d.Name, d.salary);
            }
```

```
            //lambda expression
            Console.WriteLine("**************************Print by using Lambda
expression**********************");
            employees.ToList().Where(e => e.salary >= 1500).ToList().ForEach(e =>
Console.WriteLine("Empid = {0},EmpName = {1},Empsalary = {2}", e.Id, e.Name, e.salary));

            Console.ReadLine();

        }
    }
}
```

OUTPUT:

```
**************************Print by using For Loop**********************
EmpId = 104, EmpName = ramesh, Empsalary = 1500
EmpId = 105, EmpName = mahesh, Empsalary = 1700
**************************Print by using Foreach Loop******************
Empid = 104,EmpName = ramesh,Empsalary = 1500
Empid = 105,EmpName = mahesh,Empsalary = 1700
**************************Print by using Lambda expression*************
Empid = 104,EmpName = ramesh,Empsalary = 1500
Empid = 105,EmpName = mahesh,Empsalary = 1700
```

8) Similar to 6 and 7 projects create list of Customer an Product Arrays and practice for, foreach and lambda expression

CODE: Class of customer

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

namespace Day7MorningProject8
{
    internal class Customer
    {
        public int Id;
        public string name;
        public string email;
    }

}
```

CODE: Class if product

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

namespace Day7MorningProject8
{
    internal class Product
    {
        public int Id;
        public string Name;
        public int Price;
    }
}
```

CODE: system.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
// Similar to 6 and 7 projects create list of Customer an Product Arrays
//and practice for, foreach and lambda expression
namespace Day7MorningProject8
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Customer[] Customers = new Customer[]
            {
            new Customer(){Id = 1 ,name = "sarath" , email = "586@mail.com"},
            new Customer(){Id = 2 ,name = "ravi"   , email = "255@gmail.com"},
```

```
            new Customer(){Id = 3 ,name = "sai" ,email = "599@gmail.com" }
            };

            Product[] products = new Product[]
            {

                new Product(){Id = 1 , Name="footwear", Price= 4522},
                new Product(){Id = 2 , Name="footwear", Price= 5487},
                new Product(){Id = 3 , Name="footwear", Price= 458},
                new Product(){Id = 4 , Name="footwear", Price= 457},
                new Product(){Id = 5 , Name="footwear", Price= 478}
            };

Console.WriteLine("**************************class.customer***********************");
            Console.WriteLine("*********ForLoop********");
            //for loop
            for (int i=0; i < Customers.Length ;i++ )
            {
                Console.WriteLine("Id = {0} , CustomerName = {1} email = {2}",
Customers[i].Id, Customers[i].name, Customers[i].email);

            }

            Console.WriteLine("*************foreach**********");
            //foreach loop
            foreach(var d in Customers)
            {
                Console.WriteLine("Id = {0} , CustomerName = {1} , CustomerEmail =
{2}",d.Id,d.name,d.email);
            }

            Console.WriteLine("***********lambda expression**************");
            //Lambda Expression
            Customers.ToList().ForEach(d => Console.WriteLine("Id = {0} , CustomreName = {1}
, CustomerEmail = {2}", d.Id, d.name, d.email));


Console.WriteLine("************************class.Product*******************************");
            Console.WriteLine("*************foreach**********");
            for (int i = 0; i < products.Length; i++)
            {
                Console.WriteLine("Id = {0} , ProductName = {1} ProductPrice = {2}",
products[i].Id, products[i].Name, products[i].Price);

            }
            Console.WriteLine("*************foreach  loop**********");
            //foreach loop
            foreach (var d in products)
            {
                Console.WriteLine("Id = {0} , ProductName = {1} , productPrice = {2}", d.Id,
d.Name, d.Price);
            }

            Console.WriteLine("***********lambda expression**************");
            //Lambda Expression
            products.ToList().ForEach(d => Console.WriteLine("Id = {0} , ProductName = {1} ,
ProductPrice = {2}", d.Id, d.Name, d.Price));
```

```
            Console.ReadLine();
        }
    }
}
```

OUTPUT: