

DAY7 MORNING ASSIGNMENT
BY
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PROJECT 1:

Create Employee class with three variables and two methods Read Employee and Print Employee 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 Day7MorningAssignment
{
    //*****
    //***Done By: Pavan //
    //***** Purpose: Creating Class Employee;//
    class Employee
    {
        public int id;
        public string name;
        public string 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 = Console.ReadLine();
        }
        public void PrintEmployee()
        {
            Console.WriteLine($"id={id},name = {name}, salary= {salary}");
        }
        internal class Program
        {
            static void Main (string [] args)
            {
                Employee emp = new Employee ();
            }
        }
    }
}
```

```
emp.ReadEmployee();  
emp.PrintEmployee();  
Console.ReadLine();
```

```
}  
}  
}  
}
```

OUTPUT:

```
enter id:  
12  
enter name:  
pavan  
enter salary:  
20000  
id=12,name = pavan,salary= 20000
```

Q2) Write the 3 def of class and 4 points about object discussed in the class.

CLASS:

Definition1: A class is a group of variables and methods and in which methods deals with those variables.

Definition2: Also, a class is like a design to create objects.

Definition3: And also, it can be defined as a class consists of the state and behavior.

OBJECT:

- An object is an instance of a class.
- We can create any number of objects
- Objects occupy memory.
- Objects are **reference type** because when a variable is occupying a memory so called as reference type.
- An Object consists of 3 types

- 1) **STATE:** It is represented by attributes of an object.
- 2) **BEHAVIOR:** It is represented by methods of an object.
- 3) **IDENTITY:** It gives a unique name to an object and enables one object to interact with other objects.

PROJECT: 5

Create Employee class with 3 public variables. Create Employee object and initialize with values 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 Day7Project2
{
    /**** DONE BY: PAVAN ***/
    /*** PURPOSE: CREATING 3 PUBLIC VARIABLES AND INITIALIZING IT.***/
    class Employee
    {
        public int id;
        public string name;
        public int salary;
    }
    internal class Program
    {
        static void Main (string [] args)
        {
            Employee emp = new Employee () {id = 12345, name = "PAVAN", salary = 25000};
            Console.WriteLine($"id = {emp.id}, name = {emp.name}, salary = {emp.salary}");
            Console.ReadLine();
        }
    }
}
```

OUTPUT:

```
id = 12345,name = PAVAN,salary = 25000
```

PROJECT: 6

Create employees array object and initialize with 5 employees using 3 loops.

CODE:

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

namespace Day7Project3
{
    /**** DONE BY: PAVAN ****//
    /**** PURPOSE: CREATING 3 PUBLIC VARIABLES AND INITIALIZING IT USING 3 LOOPS****//
    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 = 1, name = "PAVAN", salary = 50000},
                new Employee() {id = 2, name = "MANOJ.K", salary = 45000},
                new Employee() {id = 3, name = "MANOJ.Y", salary = 43000},
                new Employee() {id = 4, name = "VAMSI", salary = 41000},
                new Employee() {id = 5, name = "VIHAR", salary = 42000}
            };
            //for LOOP//
            for (int i = 0; i < employees.Length; i++)
            {
                Console.WriteLine($"id ={employees[i].id}, name = {employees[i].name}, salary =
{employees[i].salary}");
            }
            Console.ReadLine();
            // foreach loop//
            foreach (var e in employees)
            { Console.WriteLine($"id ={e.id}, name = {e.name}, salary = {salary}");
            }
            Console.ReadLine();

            //Lambda expression//
            employees.ToList().ForEach(e => Console.WriteLine($"id ={e.id}, name = {e.name}, salary = {e.salary}"));
            Console.ReadLine();
        }
    }
}
```

```
}
```

OUTPUT:

```
id =1,name = PAVAN,salary = 50000
id =2,name = MANOJ.K,salary = 45000
id =3,name = MANOJ.Y,salary = 43000
id =4,name = VAMSI,salary = 41000
id =5,name = VIHAR,salary = 42000

id =1,name = PAVAN,salary = 50000
id =2,name = MANOJ.K,salary = 45000
id =3,name = MANOJ.Y,salary = 43000
id =4,name = VAMSI,salary = 41000
id =5,name = VIHAR,salary = 42000

id =1,name = PAVAN,salary = 50000
id =2,name = MANOJ.K,salary = 45000
id =3,name = MANOJ.Y,salary = 43000
id =4,name = VAMSI,salary = 41000
id =5,name = VIHAR,salary = 42000
```

PROJECT: 7

write code to print employees who is getting salary ≥ 43000

CODE:

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

namespace Day7Project3
{
    /**** DONE BY: PAVAN ***/
    /*** PURPOSE: CALCULATING THE RANGE USING 3 LOOPS***/
    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 = 1, name = "PAVAN", salary = 50000},
    new Employee() {id = 2, name = "MANOJ.K", salary = 45000 },
    new Employee() {id = 3, name = "MANOJ.Y", salary = 43000},
    new Employee() {id = 4, name = "VAMSI", salary = 41000},
    new Employee() {id = 5, name = "VIHAR", salary = 42000}
};
//for LOOP//
for (int i = 0; i < employees.Length; i++)
{
    if (employees[i].salary >= 43000)
        Console.WriteLine($"id ={employees[i].id}, name = {employees[i].name}, salary =
{employees[i].salary}");
}
Console.ReadLine();
// foreach loop//
foreach (var e in employees)
{
    if(e.salary >= 43000)
        Console.WriteLine($"id ={e.id}, name = {e.name}, salary = {e.salary}");
}
Console.ReadLine();

//Lambda expression//

employees.ToList().Where(e=>e.salary >= 43000).ToList().ForEach(e => Console.WriteLine($"id ={e.id},
name = {e.name}, salary = {e.salary}"));
Console.ReadLine();
}
}
}

```

OUTPUT:

```

id =1,name = PAVAN,salary = 50000
id =2,name = MANOJ.K,salary = 45000
id =3,name = MANOJ.Y,salary = 43000

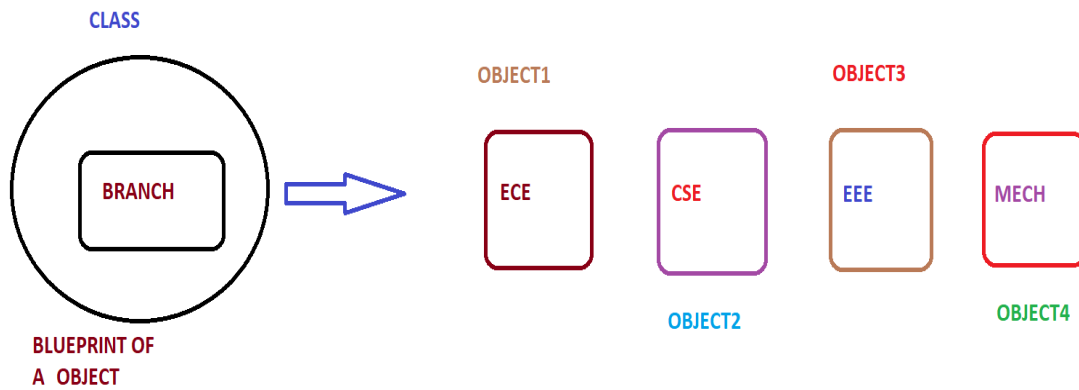
```

Q3)

Pictorially represent class and multiple objects

CLASS:

A class is like a design to create objects. It's like a blueprint to the object. In the below pictorial diagram, we can observe the blueprint of object.



The above blueprint explains that the different branches present in a college. Here College is a class and Branch is a method. So, Branch is a method, in a class different methods are selected like ECE, CSE, EEE..etc..

PROJECT: 4

Create below classes: 1. Customer 2. Product 3. Seller 4. Department

CODE:

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

// Author: PAVAN
// Purpose: Creating a 4 different Classes.
// Reference: To Check the Reference of the code. Go through the Day7Project2 folder for complete Code.
namespace Day7Project2
{
    internal class Program
    {
        // Customer Class
        using System;
        using System.Collections.Generic;
        using System. LINQ;
        using System. Text;
        using System.Threading.Tasks;

        namespace Day7Project2
        {
            internal class Customer
            {
                private int customerId;
                private string customerName;
```

```

private string customerSubscriptionDetails;

public void CreateCustomerData()
{
    Console.WriteLine("\nEnter Customer ID: ");
    customerId = Convert.ToInt32(Console.ReadLine());

    Console.WriteLine("\nEnter Customer Name: ");
    customerName = Console.ReadLine();

    Console.WriteLine("\nEnter Customer Subscription Type: ");
    customerSubscriptionDetails = Console.ReadLine();

}

public void DisplayCustomerProfile()
{
    Console.WriteLine("\n----- Customer Details ----- \n");
    Console.WriteLine($" \n\tCustomer Id: {customerId} \n\tCustomer Name: {customerName}" +
        $" \n\tsubscription Type: {customerSubscriptionDetails}");
}
}
}

// Products Class//
using System;
using System.Collections.Generic;
using System. LINQ;
using System. Text;
using System.Threading.Tasks;

namespace Day7Project2
{
    internal class Products
    {
        private int productID;
        private string productName;
        private string productBrand;
        private int productPrice;

        public void CreateProductData()
        {
            Console.WriteLine("\nEnter the Product ID: ");
            productID = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("\nEnter the Product Name: ");
            productName = Console.ReadLine();

            Console.WriteLine("\nEnter the Product Brand: ");
            productBrand = Console.ReadLine();

            Console.WriteLine("\nEnter the Product Price: ");

```



```

        productPrice = Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("\n");
    }

    public void DisplayProducts()
    {
        Console.WriteLine("\n----- Product Details ----- \n");
        Console.WriteLine($"{ "\tProduct Id: {productID}\n\tProduct Name: {productName}" +
            $"{ "\tProduct Brand: {productBrand}\n\tProduct Price: {productPrice}"}");
    }
}

```

//Seller class//

```

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

```

```

namespace Day7Project2

```

```

{
    internal class Seller
    {
        private int sellerId;
        private string sellerName;
        private string sellerLocation;
        private string sellerType;

        public void CreateSellerData()
        {
            Console.WriteLine("\nEnter Seller Id: ");
            sellerId = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("\nEnter Seller Name : ");
            sellerName = Console.ReadLine();

            Console.WriteLine("\nEnter Seller Location : ");
            sellerLocation = Console.ReadLine();

            Console.WriteLine("\nEnter Seller Type: ");
            sellerType = Console.ReadLine();
            Console.WriteLine("\n");
        }

        public void DisplaySellerData()
        {
            Console.WriteLine(" Seller Details ");
            Console.WriteLine($"{ "\tSeller Id: {sellerId}\n\tSeller Name: {sellerName}" +
                $"{ "\tSeller Location: {sellerLocation}\n\tSeller Type: {sellerType}"}");
        }
    }
}

```

// Department class//

```

using System;

```

```

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

namespace Day7Project2
{
    internal class Department
    {
        private int departmentId;
        private string departmentName;

        public void ReadDepartment()
        {
            Console.WriteLine("\n Enter Department ID: ");
            departmentId = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("\nEnter Department Name: ");
            departmentName = Console.ReadLine();
            Console.WriteLine("\n");
        }
        public void DisplayDepartment()
        {
            Console.WriteLine(" Department Details ");
            Console.WriteLine($"{ "\n\t Department Id: {departmentId}\n\t Department Name: {departmentName}");
        }
    }
}

```

OUTPUT:

Enter Customer Details :	Enter Department Details :
Enter Customer ID :	Enter Department ID :
12345	4243424
Enter Customer Name :	Enter Department Name :
pavan	Insurance
Enter Customer Subscription Type :	
aha	
Enter Product Details :	
Enter the Product ID :	Customer Details
45678	Customer Id : 12345
Enter the Product Name :	Customer Name : pavan
Tv	Subscription Type : aha
Enter the Product Brand :	Mobile No. :
Sony	Product Details
Enter the Product Price :	Product Id : 45678
70000	Product Name : Tv
Enter Seller Details :	Product Brand : Sony
Enter Seller Id :	Product Price : 70000
898989	Seller Details
Enter Seller Name :	Seller Id : 898989
Bajaj	Seller Name : Bajaj
Enter Seller Location :	Seller Location : Nizampet
Nizampet	Seller Type : Online
Enter Seller Type :	Dept Details
Online	Department Id : 4243424
	Department Name : Insurance