Assignment
BY
Vinay Kudali
01-02-2022

NB Healthcare Technologies

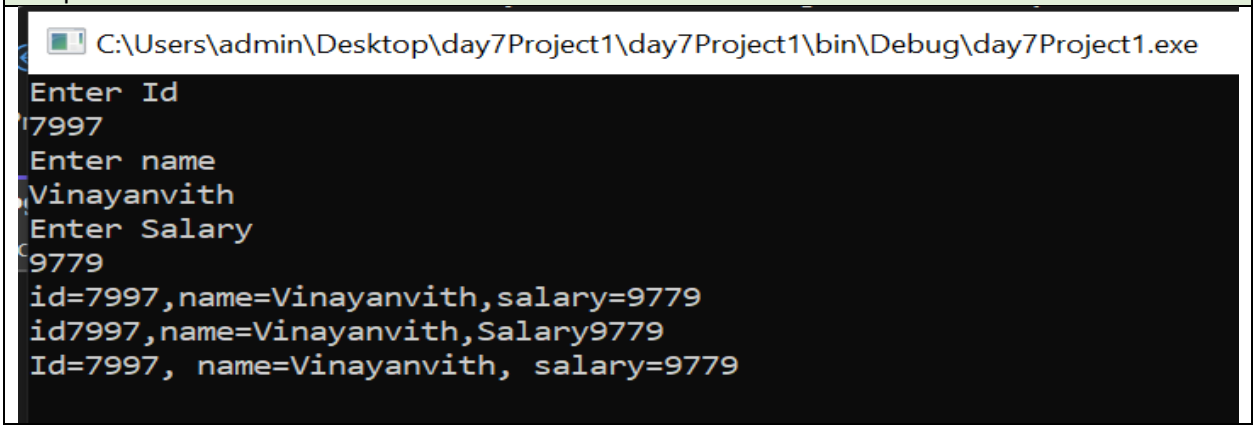
1) Employee class with three variables and two methods Read Employee and Print Employee and create an object and call methods. Create An Object and call Methods.

Code:

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

namespace day7Project1
{

   //Authour vinay kudali
   //purpose Class With Three Variables and Two Methods ReadEmployee and PrintEmployee Create an Object and call methods
   class Employee
   {
      public int Id;
      public string name;
      public 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}");
         Console.WriteLine("id{0},name={1},Salary{2}", Id, name, salary);
         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:



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

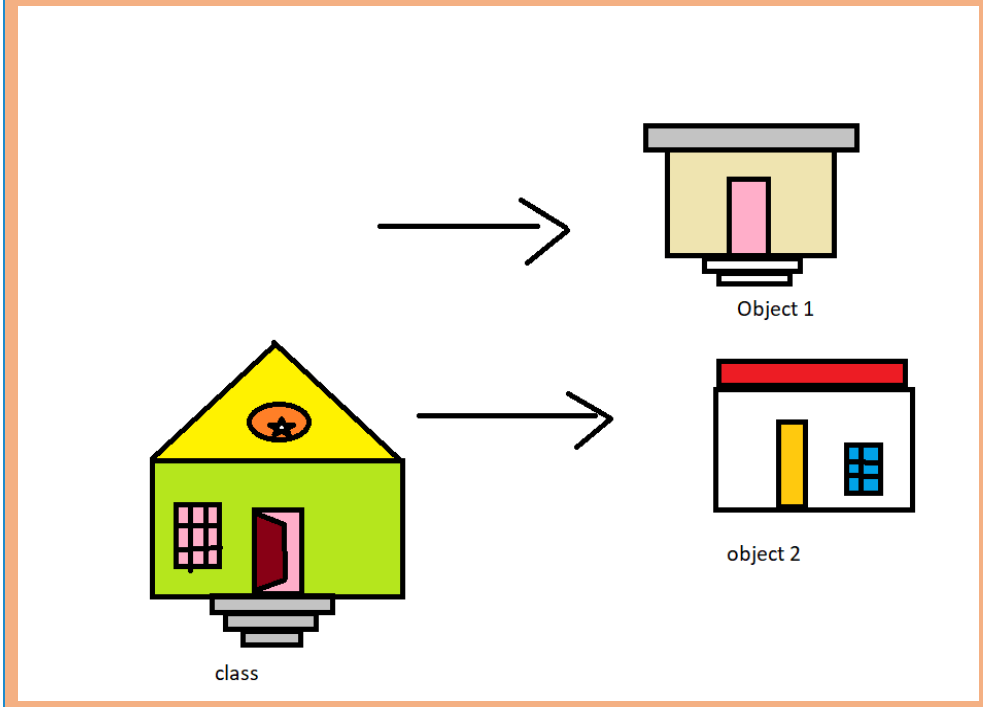
Class:

1. A Class is Group of Variables and Methods.
2. A Class is Design / Blueprint To create object.
3. A Class Consists of state and behavior.

Object:

1. An Object is an Instance Variable
2. We can create any no. Of classes.
3. Object occupy memory.
4. Object is reference types.

3. Pictorially represent class and multiple objects



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

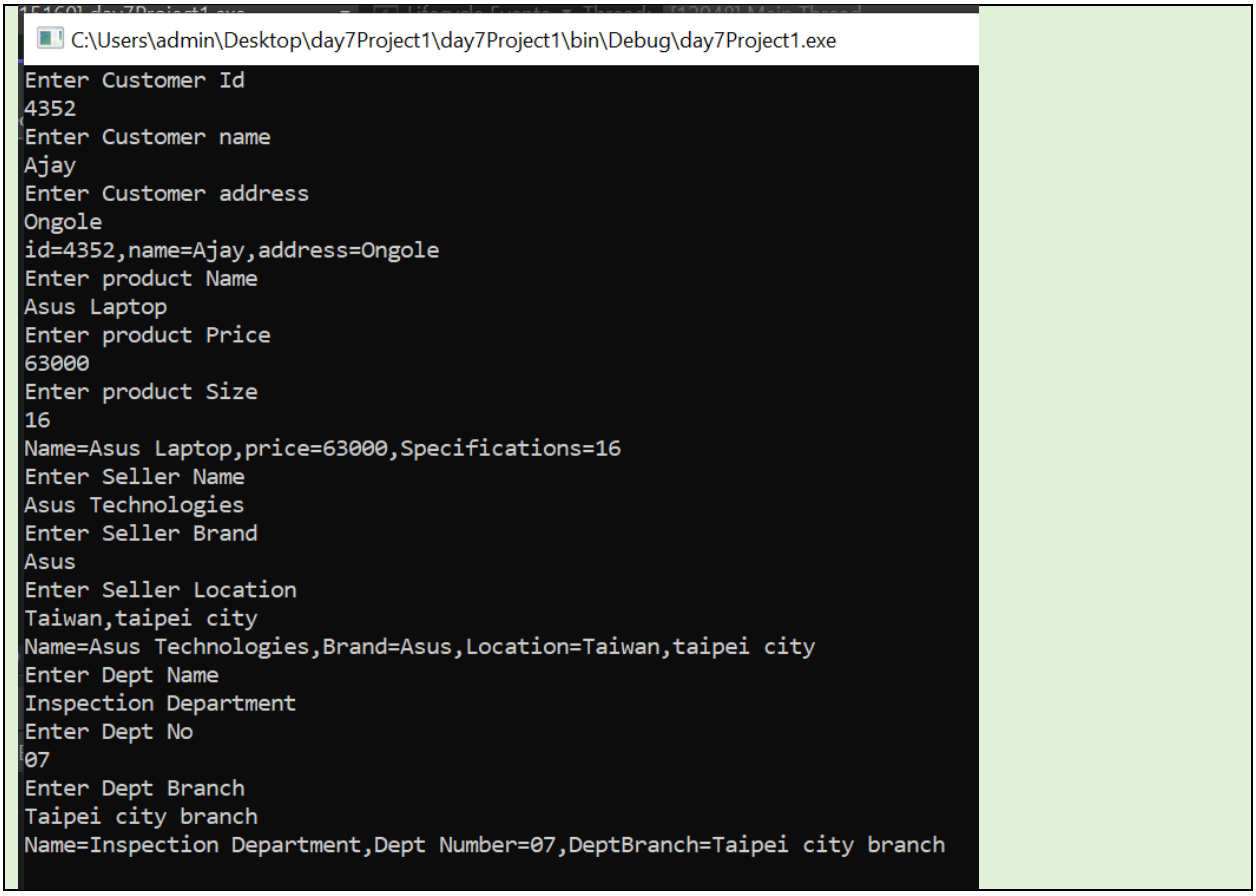
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace day7Project2
{
   //Authour vinay kudali
   //purpose  Classes: customer,product,seller,department
   class Customer
   {
      public int Id;
      public string Name;
      public string Address;

      public void ReadCustomer()
      {
         Console.WriteLine("Enter Customer Id");
```

```
        Id=Convert.ToInt32(Console.ReadLine());

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

        Console.WriteLine("Enter Customer address");
        Address=Console.ReadLine();

    }

    public void PrintCustomer()
    {
        Console.WriteLine($"id={Id},name={Name},address={Address}");
    }
}




class Product
{
    public string Name;
    public int Price;
    public string Size;

    public void ReadProduct()
    {
        Console.WriteLine("Enter product Name");
        Name=Console.ReadLine();

        Console.WriteLine("Enter product Price");
        Price=Convert.ToInt32(Console.ReadLine());

        Console.WriteLine("Enter product Size");
        Size=Console.ReadLine();

    }

    public void PrintProduct()
    {
        Console.WriteLine($"Name={Name},price={Price},Specifications={Size}");

    }

}
class Seller
{
    public string Name;
```

```
    public string Brand;
    public string Location;

    public void ReadSeller()
    {
        Console.WriteLine("Enter Seller Name");
        Name=Console.ReadLine();

        Console.WriteLine("Enter Seller Brand");
        Brand=Console.ReadLine();

        Console.WriteLine("Enter Seller Location");
        Location=Console.ReadLine();

    }

    public void PrintSeller()
    {
        Console.WriteLine($"Name={Name},Brand={Brand},Location={Location}");

    }
}
class Department
{
    public string DeptName;
    public string DeptNo;
    public string DeptBranch;

    public void ReadDepartment()
    {
        Console.WriteLine("Enter Dept Name");
        DeptName=Console.ReadLine();

        Console.WriteLine("Enter Dept No");
        DeptNo=Console.ReadLine();

        Console.WriteLine("Enter Dept Branch");
        DeptBranch=Console.ReadLine();

    }

    public void PrintDepartment()
    {
        Console.WriteLine($"Name={DeptName},Dept Number={DeptNo},DeptBranch={DeptBranch}");

    }
    internal class Program
    {
```

```
        static void Main(string[] args)
        {
            Customer cus = new Customer();
            cus.ReadCustomer();
            cus.PrintCustomer();

            Product prd = new Product();
            prd.ReadProduct();
            prd.PrintProduct();

            Seller slr = new Seller();
            slr.ReadSeller();
            slr.PrintSeller();

            Department Dept = new Department();
            Dept.ReadDepartment();
            Dept.PrintDepartment();

            Console.ReadLine();
        }
    }
  }

}
```

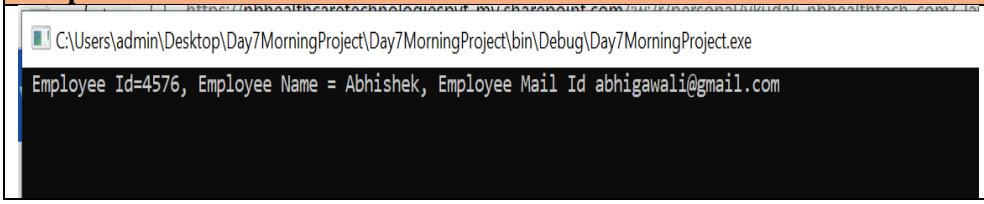
Output:



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 Day7MorningProject
{
   class Employee
   {
      public int EmpID;
      public String EmpName;
      public string EmpMailId;
      static void Main(string[] args)
      {
         Employee emp = new Employee() { EmpID = 4576,  EmpName = "Abhishek", EmpMailId =
"abhigawali@gmail.com"};
         Console.WriteLine($" Employee Id={emp.EmpID}, Employee Name = {emp.EmpName},
Employee Mail Id {emp.EmpMailId}");

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

Output:



6. Create Employee class as shown below: class Employee { public int id; public string name; public int salary; } now create employees array object and

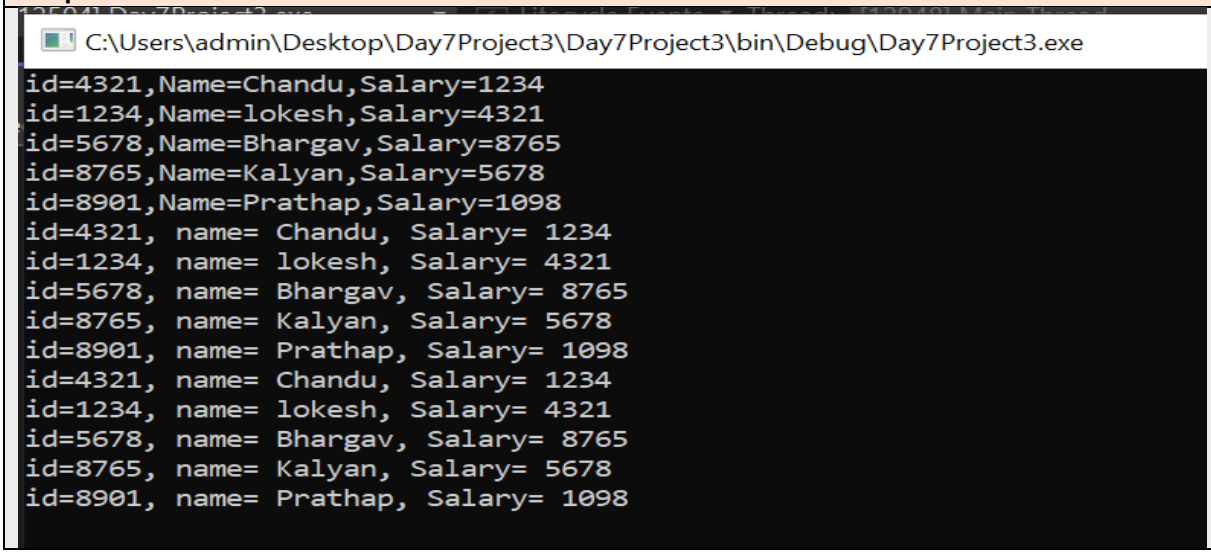
initialize with 5 employees write code using a. for loop b. foreach loop c. lambda expression .

Code:

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

namespace Day7Project3
{
   //Author = Vinay Kudali
   //Purpose = Employee class with array object and intilisation
   class Employee
   {
      public int Id;
      public string Name;
      public int Salary;
      static void Main(string[] args)

      {
         Employee[] emp = new Employee[]

         {
            new Employee() { Id = 4321, Name ="Chandu", Salary=1234 },
            new Employee() { Id = 1234, Name ="lokesh", Salary=4321 },
            new Employee() { Id = 5678, Name ="Bhargav", Salary=8765 },
            new Employee() { Id = 8765, Name ="Kalyan", Salary=5678 },
            new Employee() { Id = 8901, Name ="Prathap", Salary=1098 },
         };

         //Using For Loop
         for (int i = 0; i<emp.Length; i++)
         {
            Console.WriteLine($"id={emp[i].Id},Name={emp[i].Name},Salary={emp[i].Salary}");

         }
         //using ForEach loop
         foreach (Employee e in emp)
         {
            Console.WriteLine($"id={e.Id}, name= {e.Name}, Salary= {e.Salary}");
         }
         //using Lambda Expression
         emp.ToList().ForEach(e => Console.WriteLine($"id={e.Id}, name= {e.Name}, Salary=
{e.Salary}"));

         Console.ReadLine();
```

```
    }
  }
}
```

Output:



7. For the above project, write code to print employees who is getting salary >=5000 using for loop foreach loop lambda expression

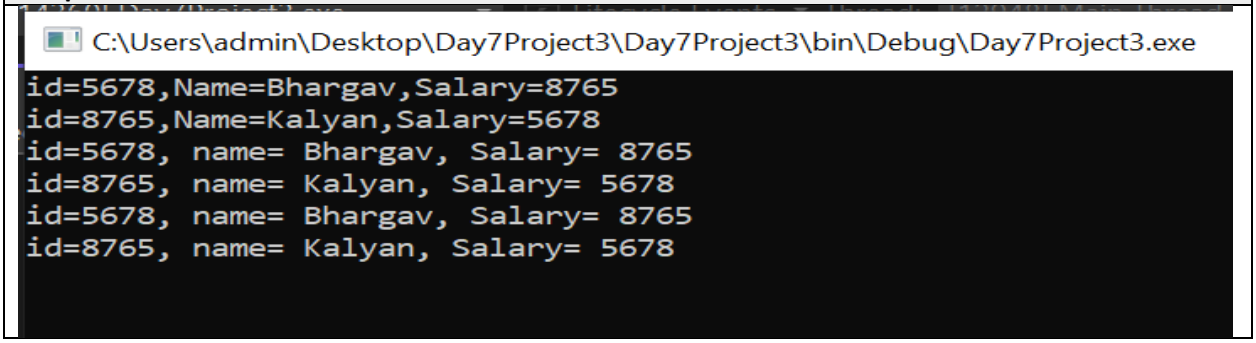
Code:

```
using System;
```

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

namespace Day7Project3
{
   //Author = Vinay Kudali
   //Purpose = Employee class with array object and intialisation
   class Employee
   {
      public int Id;
      public string Name;
      public int Salary;
      static void Main(string[] args)

      {
         Employee[] emp = new Employee[]

         {
            new Employee() { Id = 4321, Name ="Chandu", Salary=1234 },
            new Employee() { Id = 1234, Name ="lokesh", Salary=4321 },
            new Employee() { Id = 5678, Name ="Bhargav", Salary=8765 },
            new Employee() { Id = 8765, Name ="Kalyan", Salary=5678 },
            new Employee() { Id = 8901, Name ="Prathap", Salary=1098 },
         };

         //Using For Loop
         for (int i = 0; i<emp.Length; i++)
         {
            if (emp[i].Salary>=5000)
            Console.WriteLine($"id={emp[i].Id},Name={emp[i].Name},Salary={emp[i].Salary}");

         }
         //using ForEach loop
         foreach (Employee e in emp)
         {
            if (e.Salary>=5000)
            Console.WriteLine($"id={e.Id}, name= {e.Name}, Salary= {e.Salary}");
         }
         //using Lambda Expression

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

         Console.ReadLine();
      }
   }
```

```
}
```

Output:


C:\Users\admin\Desktop\Day7Project3\Day7Project3\bin\Debug\Day7Project3.exe
id=5678,Name=Bhargav,Salary=8765
id=8765,Name=Kalyan,Salary=5678
id=5678, name= Bhargav, Salary= 8765
id=8765, name= Kalyan, Salary= 5678
id=5678, name= Bhargav, Salary= 8765
id=8765, name= Kalyan, Salary= 5678