Day-08 Morning Assignment
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NB Healthcare Technologies

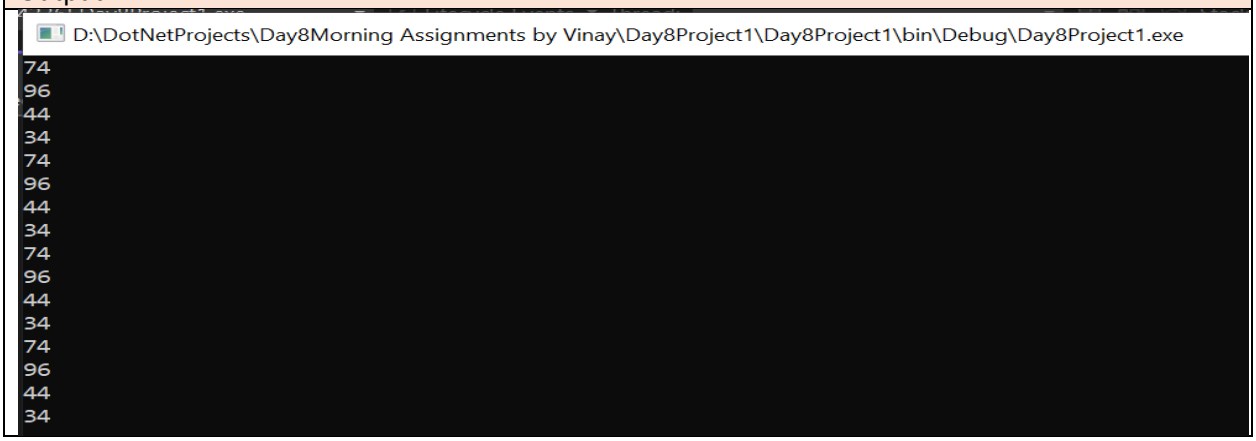
1. Declare and initialize a list with 8 values. write for loop, foreach loop, lambda, linq query to print even numbers.

Code:

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

namespace Day8Project1
{
   internal class Program
   {
      //Author: Vinay Kudali
      //Purpose: Declare & initialize a List With 8 values
      static void Main(string[] args)
      {
         List<int> data = new List<int>() { 65, 87, 99, 59, 44, 85, 34 };

         //Even Numbers Using For Loop
         for (int i = 0; i < data.Count; i++)
         {
            if (data[i] % 2 == 0)
               Console.WriteLine(data[i]);
         }

         //Even Numbers Using foreach loop
         foreach (var d in data)
         {
            if (d % 2 == 0)
               Console.WriteLine(d);
         }
         //Even Numbers using Lambda Expression
         data.Where(x => x % 2 == 0).ToList().ForEach(x => Console.WriteLine(x));
```

```
        //Even numbers using LINQ Query
        var result = from v in data
                     where v % 2 == 0
                     select v;
        result.ToList().ForEach(x => Console.WriteLine(x));

        Console.ReadLine();
    }

  }
}
```

Output:



2. Create a class Employee with three variables as discussed in the class and create a list of Employeespublic int id;
public string name;public int salary;

Code:

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

namespace Day8Project2
{
   class Employee
   {
      //Author; Vinay Kudali
```

```
      //Purpose: Create a class Employee with three variables as discussed in the class and
create a list of Employees
      public int id;
      public string name;
      public int salary;
   }
   class Program
   {
      static void Main(string[] args)
      {
         List<Employee> employees = new List<Employee>()
         {
           new Employee(){id=1,name="varun" ,salary=30400},
           new Employee(){id=2,name="navven" ,salary=19000},
           new Employee(){id=3,name=”dinesh" ,salary=31200},
           new Employee(){id=4,name="gopal" ,salary=47330},
           new Employee(){id=5,name="naresh" ,salary=21000}

         };
         //for loop
         for(int i=0;i<employees.Count;i++)
         {
            Console.WriteLine($"id={employees[i].id}, name={employees[i].name},
salary={employees[i].salary}");
         }

         //foreach loop
         foreach(var e in employees)
            Console.WriteLine($"id={e.id}, name={e.name}, salary={e.salary}");
         Console.ReadLine();
         //lambda expression
         employees.ToList().ForEach(e => Console.WriteLine($"id={e.id}, name={e.name},
salary={e.salary}"));
         //LINQ
         var result = from e in employees
                      select e;
         result.ToList().ForEach(e => Console.WriteLine($"id={e.id}, name={e.name},
salary={e.salary}"));       }
   }
}
```

Output:

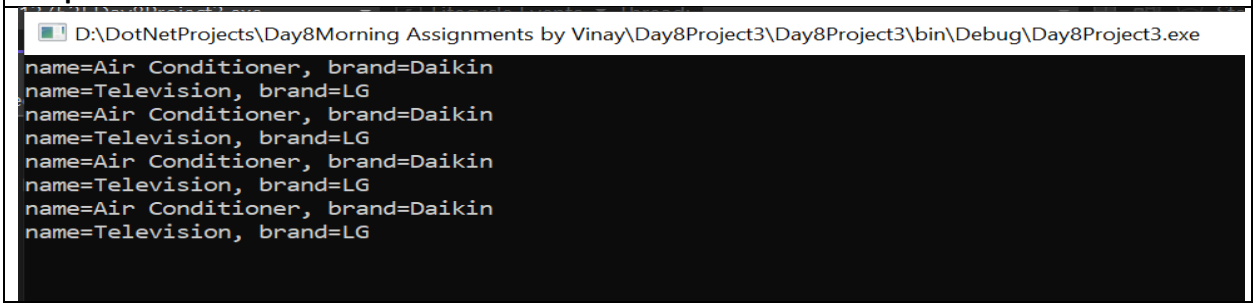
3. Create a class Product and add variables id, name, price, brand print product (name and brand) whose price is more than 500using forforeach looplambdalinq query

Code:

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

namespace Day8Project3
{
   class Product
   //Author: Vinay Kudali
   //Purpose: Create a class Product and add variables id, name, price, brand. print product(name and brand) whose price is more than 500

   {
      public int Id;
      public string name;
      public int price;
      public string brand;
   }
   class Program
   {
      static void Main(string[] args)
      {
         List<Product> products = new List<Product>()
         {
            new Product() { Id = 101, name ="Air Conditioner", price = 63000, brand = "Daikin"},
            new Product() { Id = 201, name ="Television",price = 47909, brand = "LG"},
            new Product() { Id = 301, name ="DvD player", price = 3987, brand = "Onida"},
            new Product() { Id = 401, name ="Refrigrator",price = 28890, brand = "Samsung"},
            new Product() { Id = 501, name ="Laptop", price = 43998, brand = "Dell"}
         };
```

```
        //Using For Loop
        for (int i = 0; i < products.Count; i++)
        {
           if (products[i].price>47000)
              Console.WriteLine($"name={products[i].name}, brand={products[i].brand}");
        }

        //Using foreach loop
        foreach (var d in products)
        {
           if (d.price>47000)
              Console.WriteLine($"name={d.name}, brand={d.brand}");
        }
        //using Lambda Expression
        products.Where(x => x.price>47000).ToList().ForEach(x =>
Console.WriteLine($"name={x.name}, brand={x.brand}"));


        //Even numbers using LINQ Query
        var result = from v in products
                     where v.price>47000
                     select v;
        result.ToList().ForEach(x => Console.WriteLine($"name={x.name}, brand={x.brand}"));

        Console.ReadLine();

    }
  }
}
```

Output:



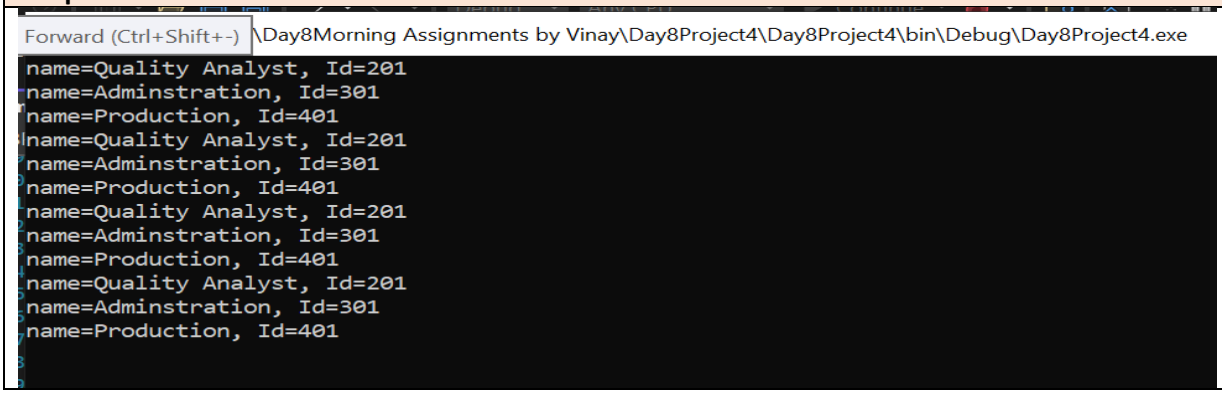
4. Create a Department class and add variables id,name,empcount write code to print id,name of departments whose empcount is greater than 50usingforforeachlambdalinq query

Code:

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

namespace Day8Project4
{
   class Department
   {
      public int Id;
      public string name;
      public int empcount;
   }
   class Program
   {
      static void Main(string[] args)
      {
         /*************************************************************
          Author: Vinay Kudali
         Purpose: Creating a department class and adding variables and printing dept id, dept name
         *************************************************************/
         List<Department> dept = new List<Department>()
         {
            new Department() { Id = 101, name ="HR Department", empcount = 5},

            new Department() { Id = 201, name ="Quality Analyst", empcount = 50},
            new Department() { Id = 301, name ="Adminstration",empcount = 30},
            new Department() { Id = 401, name ="Production", empcount = 34},
            new Department() { Id = 501, name ="Finance",  empcount = 13}
         };



         //Using For Loop
         for (int i = 0; i < dept.Count; i++)
         {
```

```
            if (dept[i].empcount > 25)
                Console.WriteLine($"name={dept[i].name}, Id={dept[i].Id}");
        }

        //Using foreach loop
        foreach (var d in dept)
        {
            if (d.empcount > 25)
                Console.WriteLine($"name={d.name}, Id={d.Id}");
        }
        //using Lambda Expression
        dept.Where(x => x.empcount > 25).ToList().ForEach(x => Console.WriteLine($"name={x.name},
Id={x.Id}"));


        //Even numbers using LINQ Query
        var result = from v in dept
                     where v.empcount > 25
                     select v;
        result.ToList().ForEach(x => Console.WriteLine($"name={x.name}, Id={x.Id}"));

        Console.ReadLine();

    }
  }
}
```

Output:



5. Create your own class and variables and initialize with some valuesforforeachlambdalinq query

Code:

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

namespace Day8Project5
{


   //Author: Vinay Kudali
   //Program: Own class with own variables and calling for,foreach,Lamda,LINQ
   class Institute
   {
      public string name;
      public string location;
      public string type;
   }
   class Program
   {
      static void Main(string[] args)
      {
         List<Institute> off = new List<Institute>()
            {
               new Institute() { name = "Jspiders", location = "Kphb", type = "Full stack java" },
               new Institute() { name = "Qspiders", location = "Panjagutta", type = " Testing " },
               new Institute() { name = "Manya", location = "Bangalore", type = "Python" },
               new Institute() { name = "Texas", location = "kukatpally", type = "IELTS" },
               new Institute() { name = "CV corp", location = "raidurg", type = "java" }
            };
         //for loop
         for (int i = 0; i < off.Count; i++)
         {
            Console.WriteLine($"name={off[i].name}, location={off[i].location}, type={off[i].type}");
         }

         //foreach loop
         foreach (var o in off)
         {
            Console.WriteLine($"name={o.name}, location={o.location}, type={o.type}");
         }

         //Lamda Expression
```

```
            off.ToList().ForEach(o => Console.WriteLine($"name={o.name}, location={o.location}, type={o.type}"));

            //LINQ Query
            var result = from o in off
                         select o;
            result.ToList().ForEach(o => Console.WriteLine($"name={o.name}, location={o.location}, type={o.type}"));

            Console.ReadLine();



        }
    }
}
```

Output:

```
D:\DotNetProjects\Day8Morning Assignments by Vinay\Day8Project5\Day8Project5\bin\Debug\Day8Project5.exe
name=Jspiders, location=Kphb, type=Full stack java
name=Qspiders, location=Panjagutta, type= Testing
name=Manya, location=Bangalore, type=Python
name=Texas, location=kukatpally, type=IELTS
name=CV corp, location=raidurg, type=java
name=Jspiders, location=Kphb, type=Full stack java
name=Qspiders, location=Panjagutta, type= Testing
name=Manya, location=Bangalore, type=Python
name=Texas, location=kukatpally, type=IELTS
name=CV corp, location=raidurg, type=java
name=Jspiders, location=Kphb, type=Full stack java
name=Qspiders, location=Panjagutta, type= Testing
name=Manya, location=Bangalore, type=Python
name=Texas, location=kukatpally, type=IELTS
name=CV corp, location=raidurg, type=java
name=Jspiders, location=Kphb, type=Full stack java
name=Qspiders, location=Panjagutta, type= Testing
name=Manya, location=Bangalore, type=Python
name=Texas, location=kukatpally, type=IELTS
name=CV corp, location=raidurg, type=java
```