DAY 8 MORNING ASSIGNMENT(02-02-2022)

- BY SARATH KASIMSETTY

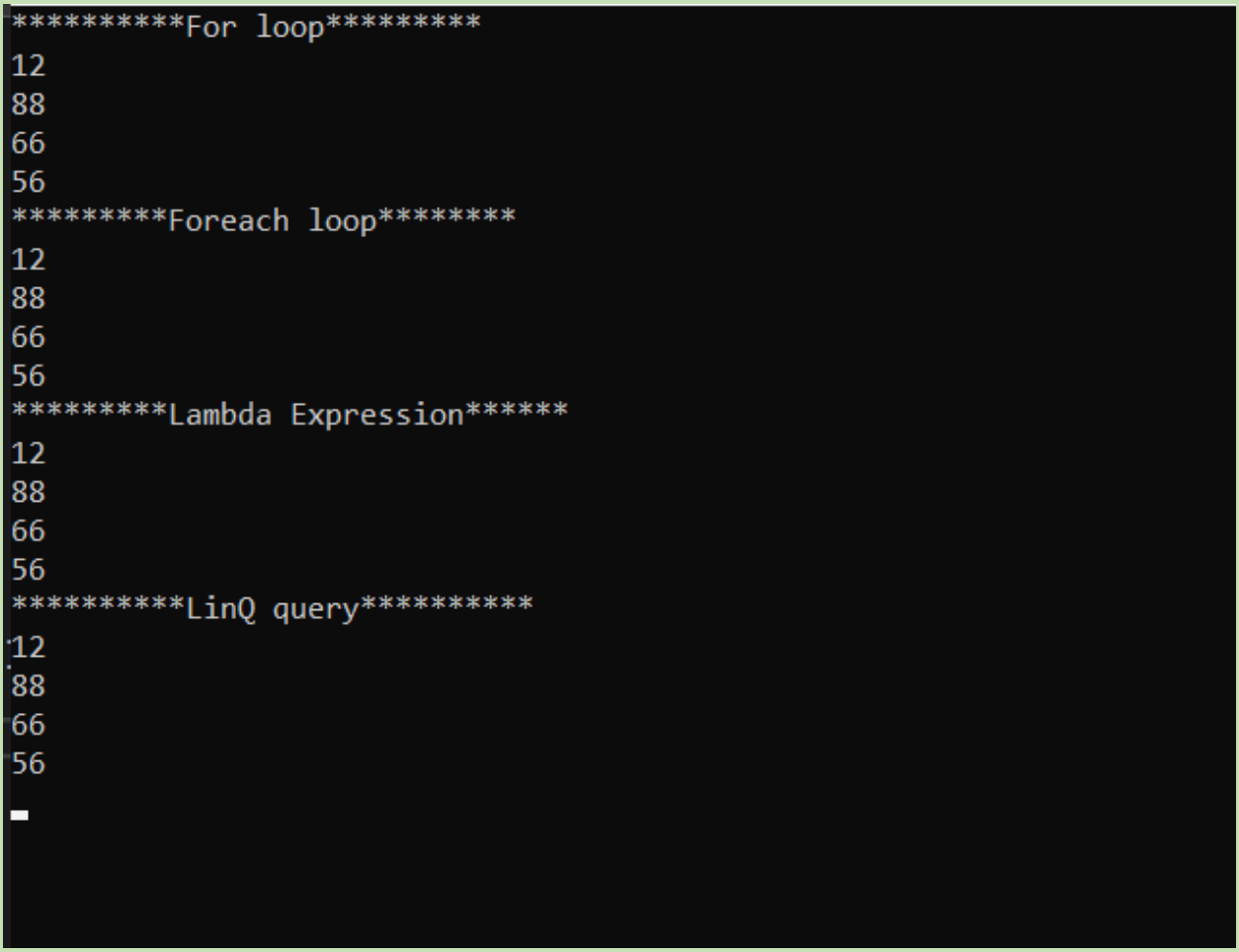
Declare and initialize a list with 8 values .write for loop, foreach loop, lambda, linQ query to print even numbers

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//sarath kasimsetty
//Declare and initialize a list with 8 values.write for loop, foreach loop, lambda, linq
query
// to print even numbers
namespace Day8MorningProject1
{
    internal class Program
    {
        static void Main(string[] args)
        {
            List<int> data= new List<int>() { 12, 45, 88, 77, 66, 75, 56, 11};

            //for loop
            Console.WriteLine("**********For loop*********");
            for (int i = 0; i < data.Count; i++)
            {
                if (data[i] % 2 == 0)
                    Console.WriteLine(data[i]);
            }

            //foreach loop
            Console.WriteLine("*********Foreach loop********");
            foreach(var d in data)
            {
                if (d % 2 == 0)
                    Console.WriteLine(d);
            }

            //Lambda expression
            Console.WriteLine("*********Lambda Expression******");
            data.ToList().Where(d => d % 2 ==
0).ToList().ForEach(d=>Console.WriteLine(d));

            //LinQ query
            Console.WriteLine("**********LinQ query**********");
            var result = from d in data
                         where d % 2 == 0
```

```
                        select d;
            result.ToList().ForEach(d=>Console.WriteLine(d));

            Console.ReadLine();

        }
    }
}
```

OUTPUT:



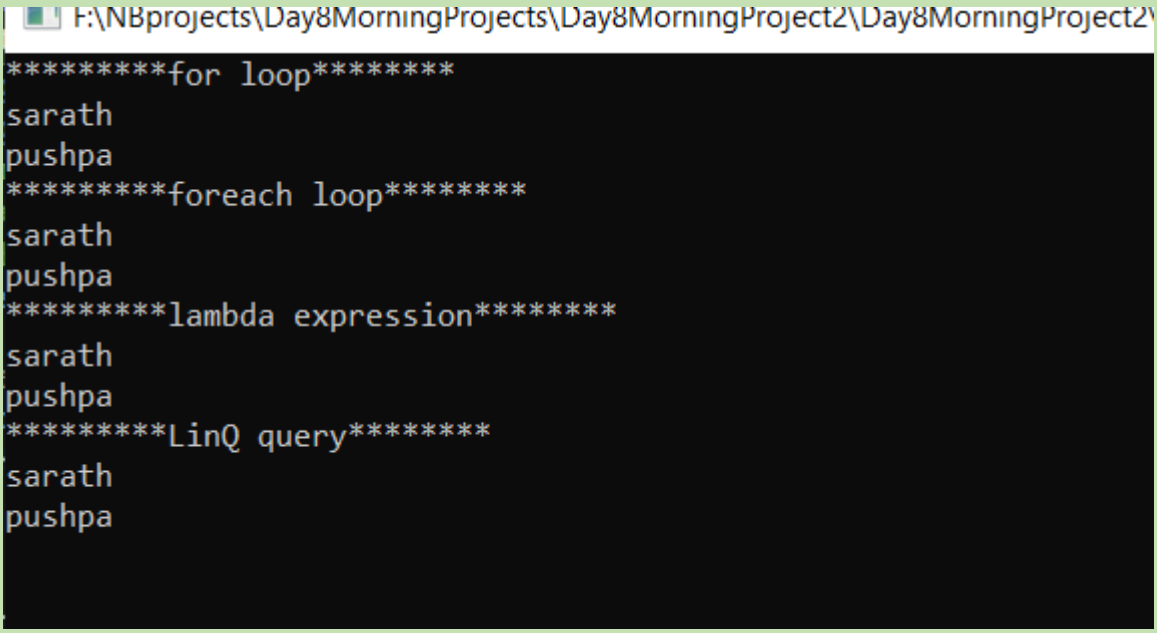
2) Create a class Employee with three variables as discussed in the class and create a list of Employees and public int id; public string name; public int salary;

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//sarath kasimsetty
//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;
namespace Day8MorningProject2
{
    internal class Employee
    {
        public int Id;
        public string Name;
        public int salary;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            List<Employee> employees= new List<Employee>()
            {
                new Employee(){Id = 121 , Name = "sarath" , salary = 6000},
                new Employee(){Id = 122 , Name = "suresh" , salary = 1500},
                new Employee(){Id = 123 , Name = "sai" ,  salary = 4000},
                new Employee(){Id = 124 , Name = "pushpa" , salary = 7500},
            };

            //for loop
            Console.WriteLine("*********for loop********");
            for (int i =0; i <employees.Count;i++)
            {
                if(employees[i].salary>5000)
                Console.WriteLine(employees[i].Name);
            }

            //foreach loop\
            Console.WriteLine("*********foreach loop********");
            foreach (var d in employees)
            {
                if(d.salary>5000)
                Console.WriteLine(d.Name);
            }

            //Lambda expression
            Console.WriteLine("*********lambda expression********");
            employees.Where(d=>d.salary>5000).ToList().ForEach(d=>
Console.WriteLine(d.Name));
```

```
            //LinQ query
            Console.WriteLine("*********LinQ query********");
            var result = from d in employees
                         where d.salary>5000
                         select d;
            result.ToList().ForEach(f => Console.WriteLine(f.Name));

            Console.ReadLine();

        }

    }
}
```

OUTPUT:



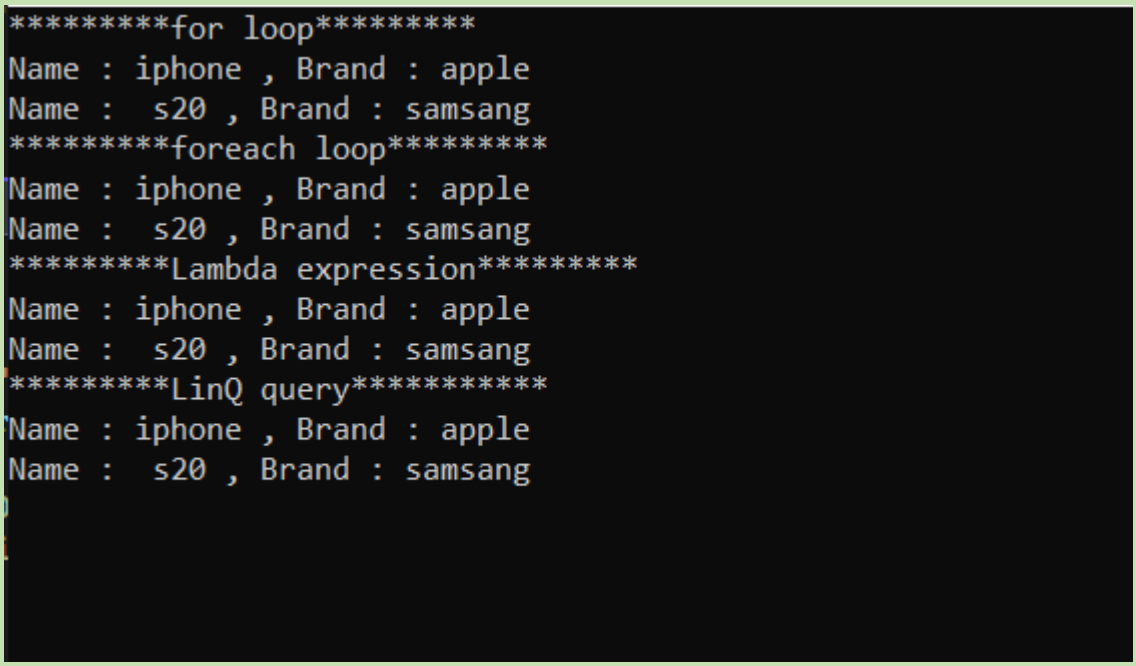
3) Create a class Product and add variabl id, name, price, brand and print product (name and brand) whose price is more than 500 using for , foreach loop, lambda ,linQ query.

CODE:

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

namespace Day8MorningProject3
{
    internal class Product
    {
        public int Id;
        public string Name;
        public int Price;
        public string Brand;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            List<Product> products = new List<Product>()
            {
                new Product(){Id = 41,Name= "iphone", Price=700,Brand="apple" },
                new Product(){Id = 42,Name= " s20", Price = 600,Brand="samsang"},
                new Product(){Id = 43,Name="v10", Price=500 , Brand="vivo"},
                new Product(){Id = 44,Name="oneplus8", Price=400,Brand="oneplus"}
            };

            //for loop
            Console.WriteLine("*********for loop*********");
            for (int i = 0; i < products.Count; i++)
              {
                if (products[i].Price > 500)
                    Console.WriteLine("Name : {0} , Brand : {1}", products[i].Name,
products[i].Brand);
               }

            //foreach loop
            Console.WriteLine("*********foreach loop*********");
            foreach(var d in products)
            {
                if (d.Price>500)
                    Console.WriteLine("Name : {0} , Brand : {1}", d.Name, d.Brand);
            }

            //Lambda expression
            Console.WriteLine("*********Lambda expression*********");
            products.Where(p => p.Price > 500).ToList().ForEach(p =>
Console.WriteLine("Name : {0} , Brand : {1}", p.Name, p.Brand));
```

```
            //LinQ query
            Console.WriteLine("*********LinQ query***********");
            var result = from p in products
                         where p.Price > 500
                         select p;
            result.ToList().ForEach(p => Console.WriteLine("Name : {0} , Brand : {1}",
p.Name, p.Brand));

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

OUTPUT:



4) Create a Department class and add variable of id,name,empcount
Write code to print id,name of departments whose empcount is greater than 50 using for , foreach ,lambda ,linq query.

CODE

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//sarath kasimsetty
//Create a Department class and add variable of id,name,empcount
//Write code to print id,name of departments whose empcount is greater than 50
using
//for,foreach,lambda,linq query
namespace Day8MorningProject4
{
    internal class Department
    {
        public int Id;
        public string Name;
        public int Empcount;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            Department[] departments = new Department[]
            {
             new Department(){Id = 1125 , Name= "cse", Empcount=120 },
             new Department(){Id = 1126,Name = "mech" , Empcount=80 },
             new Department(){Id = 1127,Name = "EEE" , Empcount= 50 },
             new Department(){Id = 1128,Name = "civil" , Empcount=30 }
            };

            //for loop
            Console.WriteLine("***************for loop***********");
            for(int i=0;i<departments.Length;i++)
            {
                if(departments[i].Empcount > 50)
                    Console.WriteLine("DepID = {0} , DepName =
{1}",departments[i].Id,departments[i].Name);
            }

            //foreach loop
            Console.WriteLine("***************foreach loop***********");
            foreach (var d in departments)
            {
                if (d.Empcount > 50)
                Console.WriteLine("DepID = {0} , DepName = {1}", d.Id, d.Name);
            }

            //Lambda expression
            Console.WriteLine("************Lambda expression*************");
            departments.Where(d => d.Empcount > 50).ToList().ForEach(d =>
Console.WriteLine("DepID = {0} , DepName = {1}", d.Id, d.Name));
```

```
            //LinQ query
            Console.WriteLine("***********LinQ query***************");
            var result = from p in departments
                         where p.Empcount > 50
                         select p;
            result.ToList().ForEach(p => Console.WriteLine("DepID = {0} , DepName
= {1}", p.Id, p.Name));

            Console.ReadLine();

        }
    }
}
```

OUTPUT: