DAY8 MORNING ASSINMENT

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NBHEALTHTECH
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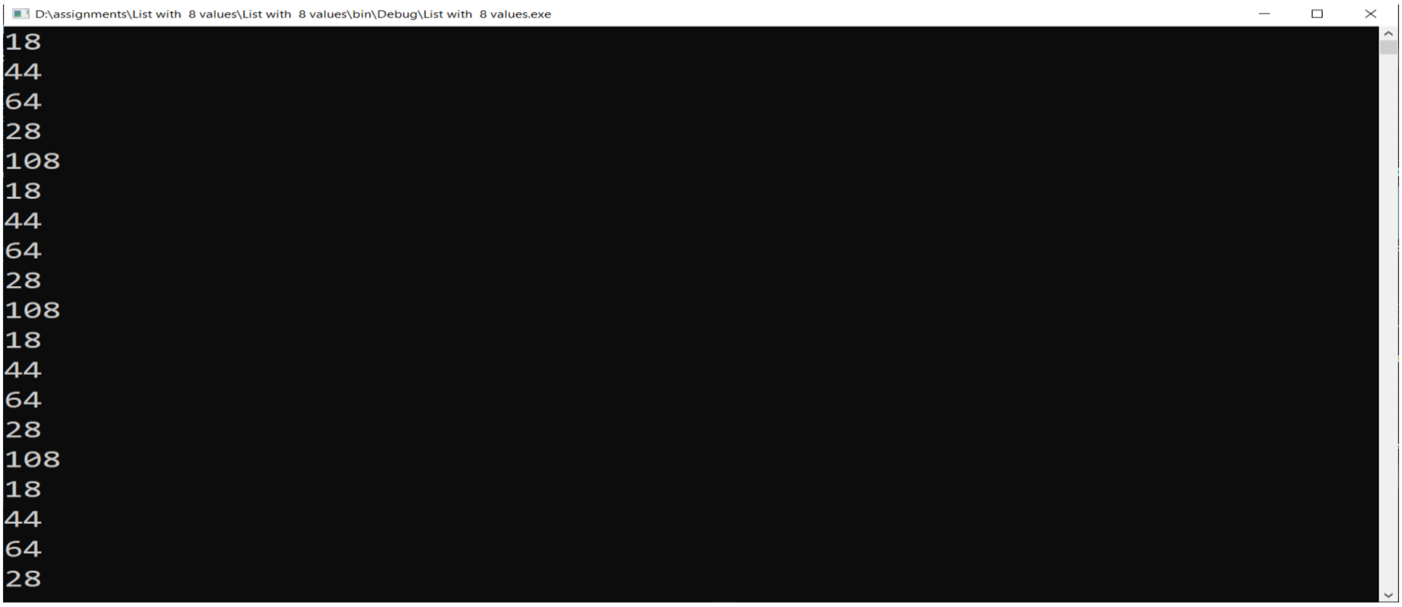
```
1. Declare and initialize a list with 8 values.
  write for loop, foreach loop, lambda, LINQ query
 to print even number.
```

Code:

```
internal class Program
    {
        //Author : Bhanu Prakash Reddy Chilukuri
        //Purpose : Declare and intialize a list with a 8 values. write for for loop,
foreach,lambda,LINQ query    `
        static void Main(string[] args)
        {
            List<int> data = new List<int>() { 18, 25, 85, 44, 64, 28, 108, 55 };

            //Even numbers using for loop
            for(int i=0;i<data.Count;i++)
            {
                if(data[i]%2==0)
                    Console.WriteLine(data[i]);
            }
            //using foreachloop
            foreach (var d in data)
            {

                if (d % 2 == 0)
                    Console.WriteLine(d);
            }
            //lamda expression
            data.Where(d=>d%2==0).ToList().ForEach(d=>Console.WriteLine(d));

            //LINQ Query

            var result=from d in data
                       where d%2==0
                       select d;
            result.ToList().ForEach(d => Console.WriteLine(d));

            Console.ReadLine();


        }
    }
```

Output:


D:\assignments\List with 8 values\List with 8 values\bin\Debug\List with 8 values.exe

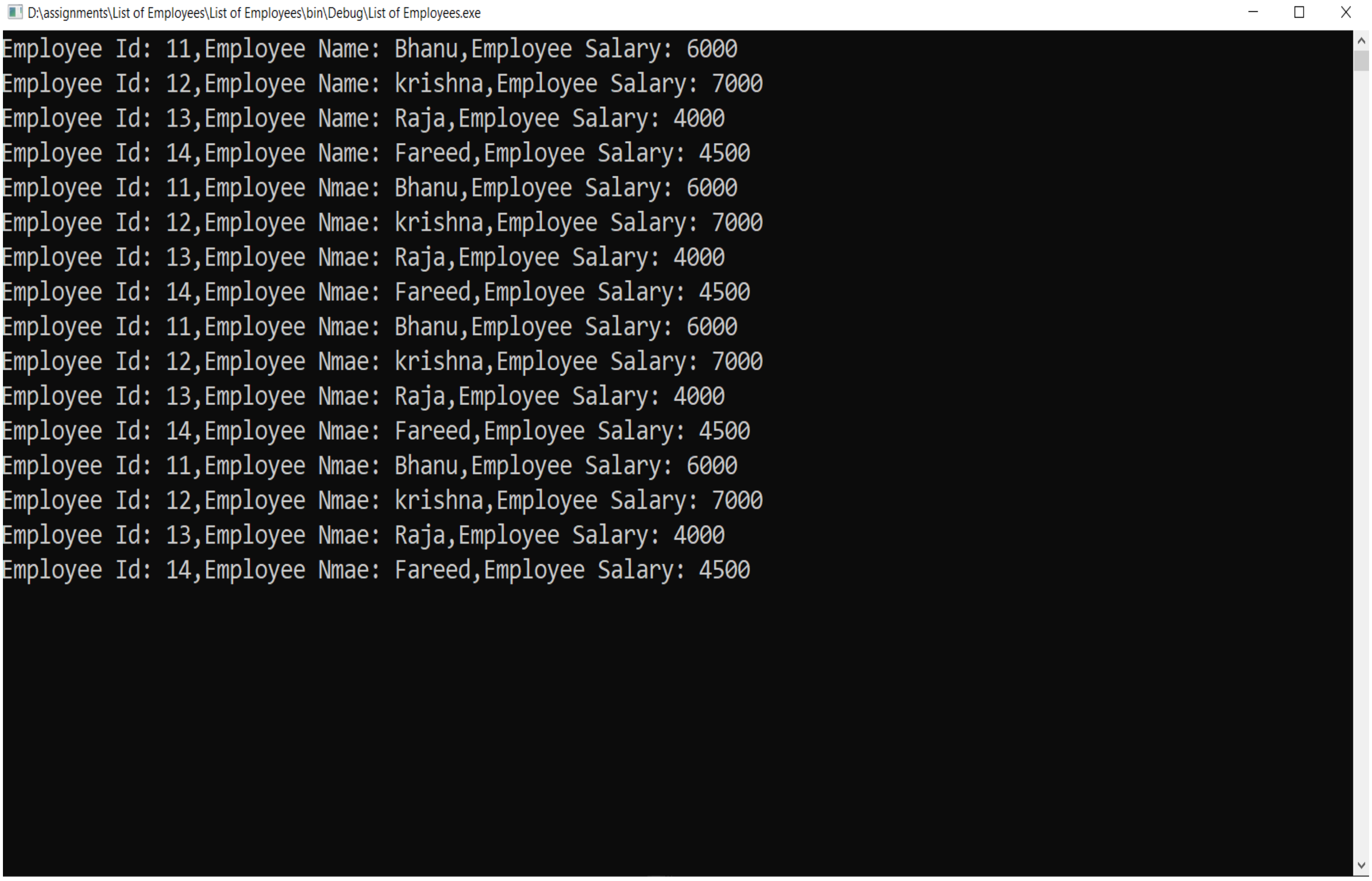
```
18
44
64
28
108
18
44
64
28
108
18
44
64
28
108
18
44
64
28
```

```
2.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;
write
for loop
foreach loop
lambda expression
linq query
```

Code:

```
//Author: Bhanu Prakash Reddy
    //Create a Class Employee with three variables with foor, foreach, lambda, linq query
{
    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=11,name="Bhanu",salary=6000},
                new Employee(){id=12,name="krishna",salary=7000},
                new Employee(){id=13,name="Raja",salary=4000},
                new Employee(){id =14,name="Fareed",salary =4500}
            };

            //For loop
            for (int i = 0; i < employees.Count; i++)
            {
                Console.WriteLine($"Employee Id: {employees[i].id},Employee Name:
{employees[i].name},Employee Salary: {employees[i].salary}");
            }
            //For Each Loop

            foreach(var e in employees)
            {
                Console.WriteLine($"Employee Id: {e.id},Employee Nmae: {e.name},Employee
Salary: {e.salary}");
            }

            //Lambda Expression
            employees.ForEach(e => Console.WriteLine($"Employee Id: {e.id},Employee Nmae:
{e.name},Employee Salary: {e.salary}"));

            //Linq query

            var result = from e in employees
                         select e;
            result.ToList().ForEach(e => Console.WriteLine($"Employee Id: {e.id},Employee
Nmae: {e.name},Employee Salary: {e.salary}"));

            Console.ReadLine();



        }
    }
```

Output:



D:\assignments\List of Employees\List of Employees\bin\Debug\List of Employees.exe

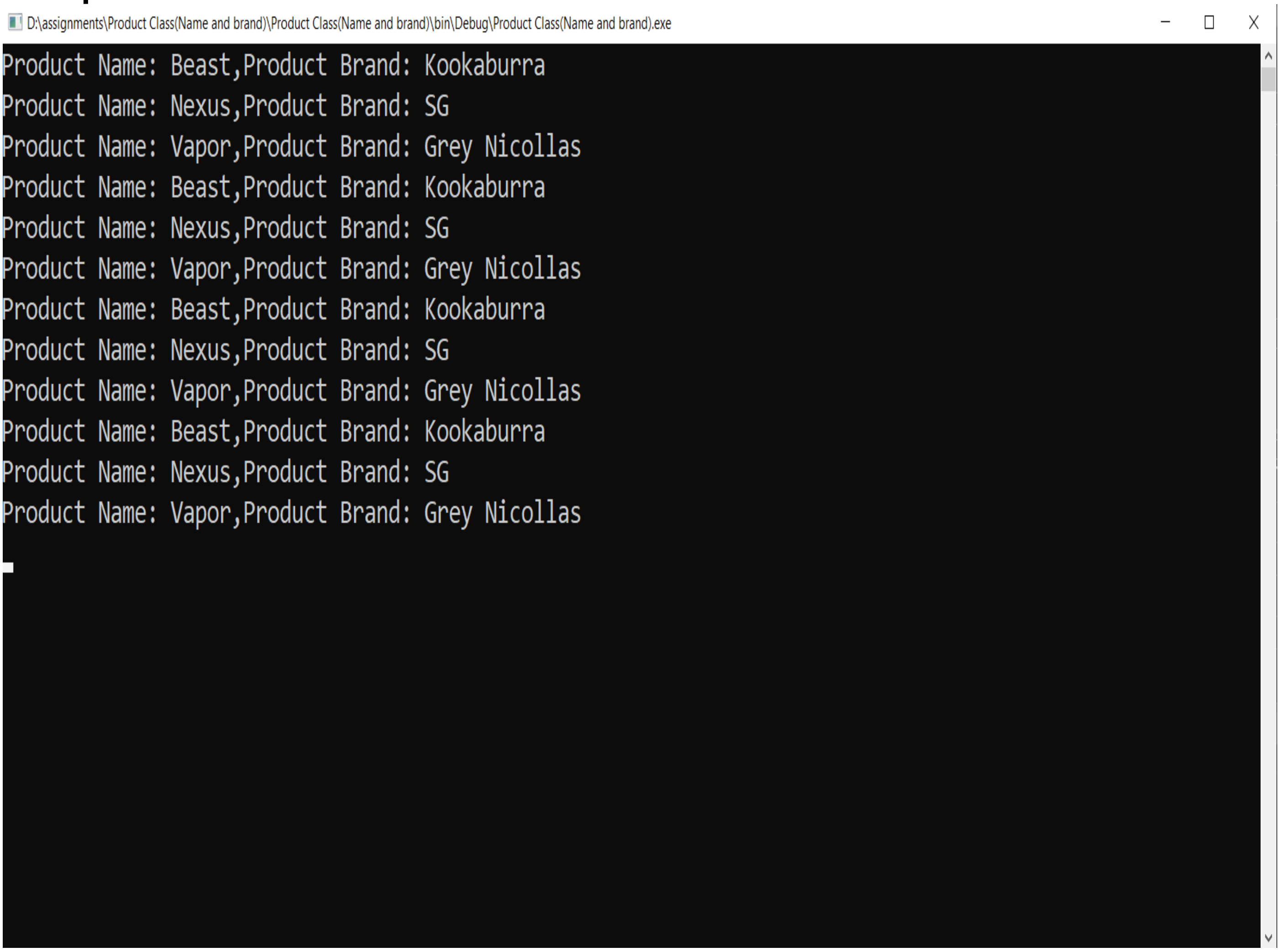
```
Employee Id: 11,Employee Name: Bhanu,Employee Salary: 6000
Employee Id: 12,Employee Name: krishna,Employee Salary: 7000
Employee Id: 13,Employee Name: Raja,Employee Salary: 4000
Employee Id: 14,Employee Name: Fareed,Employee Salary: 4500
Employee Id: 11,Employee Nmae: Bhanu,Employee Salary: 6000
Employee Id: 12,Employee Nmae: krishna,Employee Salary: 7000
Employee Id: 13,Employee Nmae: Raja,Employee Salary: 4000
Employee Id: 14,Employee Nmae: Fareed,Employee Salary: 4500
Employee Id: 11,Employee Nmae: Bhanu,Employee Salary: 6000
Employee Id: 12,Employee Nmae: krishna,Employee Salary: 7000
Employee Id: 13,Employee Nmae: Raja,Employee Salary: 4000
Employee Id: 14,Employee Nmae: Fareed,Employee Salary: 4500
Employee Id: 11,Employee Nmae: Bhanu,Employee Salary: 6000
Employee Id: 12,Employee Nmae: krishna,Employee Salary: 7000
Employee Id: 13,Employee Nmae: Raja,Employee Salary: 4000
Employee Id: 14,Employee Nmae: Fareed,Employee Salary: 4500
```

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

Code:

```
     //Author: Bhanu Prakash reddy

//create a class product and print name and brand whose price is more than 500

    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=11,name="Beast",price=1500,brand="Kookaburra"},
                new Product(){id=12,name="Kahuna",price=450,brand="kookaburra"},
                new Product(){id=13,name="Nexus",price=1250,brand="SG"},
                new Product(){id =14,name="Super Cover",price=300,brand ="SG"},
                new Product(){id =15,name="Vapor",price=2500,brand ="Grey Nicollas"}
            };

            //For loop
            for (int i = 0; i < products.Count; i++)
            {
                if(products[i].price>500)
                     Console.WriteLine($"Product Name: {products[i].name},Product Brand: 
{products[i].brand}");

            }
            //For Each Loop

            foreach (var p in products)
            {
                if(p.price>500)
                    Console.WriteLine($"Product Name: {p.name},Product Brand: {p.brand}");

            }

            //Lambda Expression
            products.Where(p => p.price > 500).ToList().ForEach(p => 
Console.WriteLine($"Product Name: {p.name},Product Brand: {p.brand}"));

            //Linq query

            var result = from p in products
                         where p.price > 500
                         select p;
            result.ToList().ForEach(p => Console.WriteLine($"Product Name: {p.name},Product 
Brand: {p.brand}"));

            Console.ReadLine();

        }
}
```

Output:



D:\assignments\Product Class(Name and brand)\Product Class(Name and brand)\bin\Debug\Product Class(Name and brand).exe

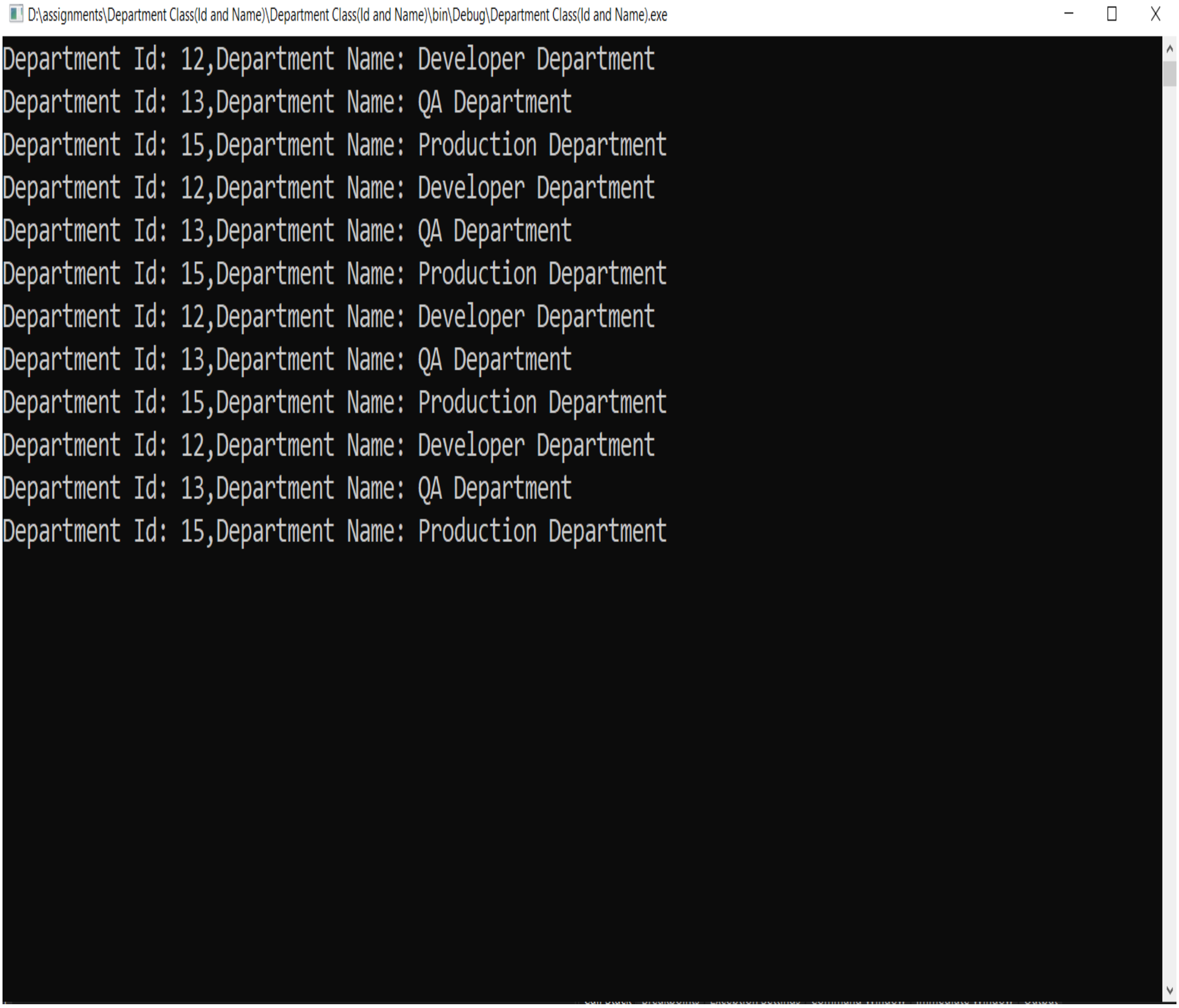
```
Product Name: Beast,Product Brand: Kookaburra
Product Name: Nexus,Product Brand: SG
Product Name: Vapor,Product Brand: Grey Nicollas
Product Name: Beast,Product Brand: Kookaburra
Product Name: Nexus,Product Brand: SG
Product Name: Vapor,Product Brand: Grey Nicollas
Product Name: Beast,Product Brand: Kookaburra
Product Name: Nexus,Product Brand: SG
Product Name: Vapor,Product Brand: Grey Nicollas
Product Name: Beast,Product Brand: Kookaburra
Product Name: Nexus,Product Brand: SG
Product Name: Vapor,Product Brand: Grey Nicollas
```

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

Code:

```
  //Author: Bhanu Prakash Reddy
    //Create a department class and print id and name whose empcount is more than 50
    internal class Department
    {
        public int id;
        public string name;
        public int empcount;
    }


    internal class Program
    {
        static void Main(string[] args)
        {
            List<Department> departments = new List<Department>()
            {
                new Department(){id=11,name="HR Deapartment",empcount=45},
                new Department(){id=12,name="Developer Department",empcount=94},
                new Department(){id=13,name="QA Department",empcount=75},
                new Department(){id =14,name="BA Department",empcount=42},
                new Department(){id =15,name="Production Department",empcount=51}
            };

            //For loop
            for (int i = 0; i < departments.Count; i++)
            {
                if (departments[i].empcount > 50)
                    Console.WriteLine($"Department Id: {departments[i].id},Department Name: 
{departments[i].name}");
            }

            //For Each Loop

            foreach (var d in departments)
            {
                if (d.empcount > 50)
                    Console.WriteLine($"Department Id: {d.id},Department Name: {d.name}");
            }

            //Lambda Expression
            departments.Where(d => d.empcount > 50).ToList().ForEach(d => 
Console.WriteLine($"Department Id: {d.id},Department Name: {d.name}"));

            //Linq query

            var result = from d in departments
                         where d.empcount > 50
                         select d;
            result.ToList().ForEach(d => Console.WriteLine($"Department Id: {d.id},Department 
Name: {d.name}"));

            Console.ReadLine();

        }
    }
```

Output:


D:\assignments\Department Class(Id and Name)\Department Class(Id and Name)\bin\Debug\Department Class(Id and Name).exe

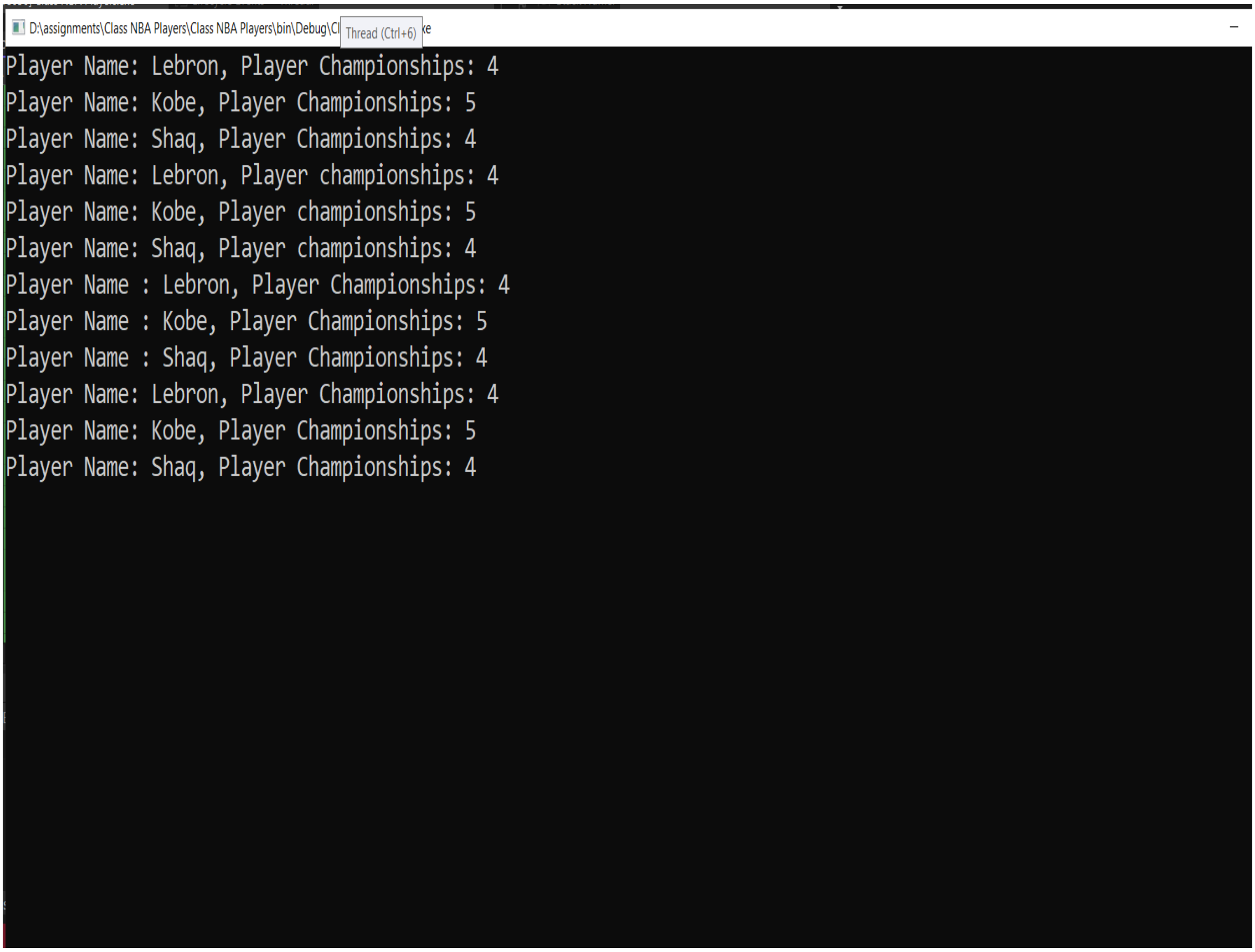
```
Department Id: 12,Department Name: Developer Department
Department Id: 13,Department Name: QA Department
Department Id: 15,Department Name: Production Department
Department Id: 12,Department Name: Developer Department
Department Id: 13,Department Name: QA Department
Department Id: 15,Department Name: Production Department
Department Id: 12,Department Name: Developer Department
Department Id: 13,Department Name: QA Department
Department Id: 15,Department Name: Production Department
Department Id: 12,Department Name: Developer Department
Department Id: 13,Department Name: QA Department
Department Id: 15,Department Name: Production Department
```

5. Create your own class and variables and initialize with some values using For, foreach, lambda and linq query

Code:

```
    internal class Program
    {
        static void Main(string[] args)
        {
            List<NBA_Players> players = new List<NBA_Players>()
            {
                new
NBA_Players(){name="Lebron",games=1346,championships=4,careerpoints=36414},
                new NBA_Players(){name="Kobe",games=1346,championships=5,careerpoints=33643},
                new NBA_Players(){name="KD",games=920,championships=2,careerpoints=24936},
                new
NBA_Players(){name="Iverson",games=914,championships=0,careerpoints=24368},
                new NBA_Players(){name="Shaq",games=1207,championships=4,careerpoints=28596}
            };

            //For loop
            for (int i = 0; i < players.Count; i++)
            {
                if (players[i].careerpoints > 25000)
                    Console.WriteLine($"Player Name: {players[i].name}, Player Championships:
{players[i].championships}");
            }

            //For Each Loop

            foreach (var p in players)
            {
                if (p.careerpoints > 25000)
                    Console.WriteLine($"Player Name: {p.name}, Player championships:
{p.championships}");
            }

            //Lambda Expression

            players.Where(p => p.careerpoints > 25000).ToList().ForEach(p =>
Console.WriteLine($"Player Name : {p.name}, Player Championships: {p.championships}"));

            //Linq query

            var result = from p in players
                         where p.careerpoints > 25000
                         select p;
            result.ToList().ForEach(p => Console.WriteLine($"Player Name: {p.name}, Player
Championships: {p.championships}"));

            Console.ReadLine();
        }
    }
```

Output:



D:\assignments\Class NBA Players\Class NBA Players\bin\Debug\Cl
Thread (Ctrl+6)
xe

```
Player Name: Lebron, Player Championships: 4
Player Name: Kobe, Player Championships: 5
Player Name: Shaq, Player Championships: 4
Player Name: Lebron, Player championships: 4
Player Name: Kobe, Player championships: 5
Player Name: Shaq, Player championships: 4
Player Name : Lebron, Player Championships: 4
Player Name : Kobe, Player Championships: 5
Player Name : Shaq, Player Championships: 4
Player Name: Lebron, Player Championships: 4
Player Name: Kobe, Player Championships: 5
Player Name: Shaq, Player Championships: 4
```