

Day-08 Morning Assignment

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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:

```

D:\DotNetProjects\Day8Morning Assignments by Vinay\Day8Project1\Day8Project1\bin\Debug\Day8Project1.exe
74
96
44
34
74
96
44
34
74
96
44
34
74
96
44
34

```

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;

```

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:

D:\DotNetProjects\Day8Morning Assignments by Vinay\Day8project2\Day8project2\bin\Debug\Day8project2.exe

```
id=1, name=varun, salary=30400
id=2, name=naveen, salary=19000
id=3, name=dinesh, salary=31200
id=4, name=gopal, salary=47330
id=5, name=naresh, salary=21000
id=1, name=varun, salary=30400
id=2, name=naveen, salary=19000
id=3, name=dinesh, salary=31200
id=4, name=gopal, salary=47330
id=5, name=naresh, salary=21000
```

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

```

D:\DotNetProjects\Day8Morning Assignments by Vinay\Day8Project3\Day8Project3\bin\Debug\Day8Project3.exe
name=Air Conditioner, brand=Daikin
name=Television, brand=LG
name=Air Conditioner, brand=Daikin
name=Television, brand=LG
name=Air Conditioner, brand=Daikin
name=Television, brand=LG
name=Air Conditioner, brand=Daikin
name=Television, brand=LG

```