2nd Feb Assignments

By

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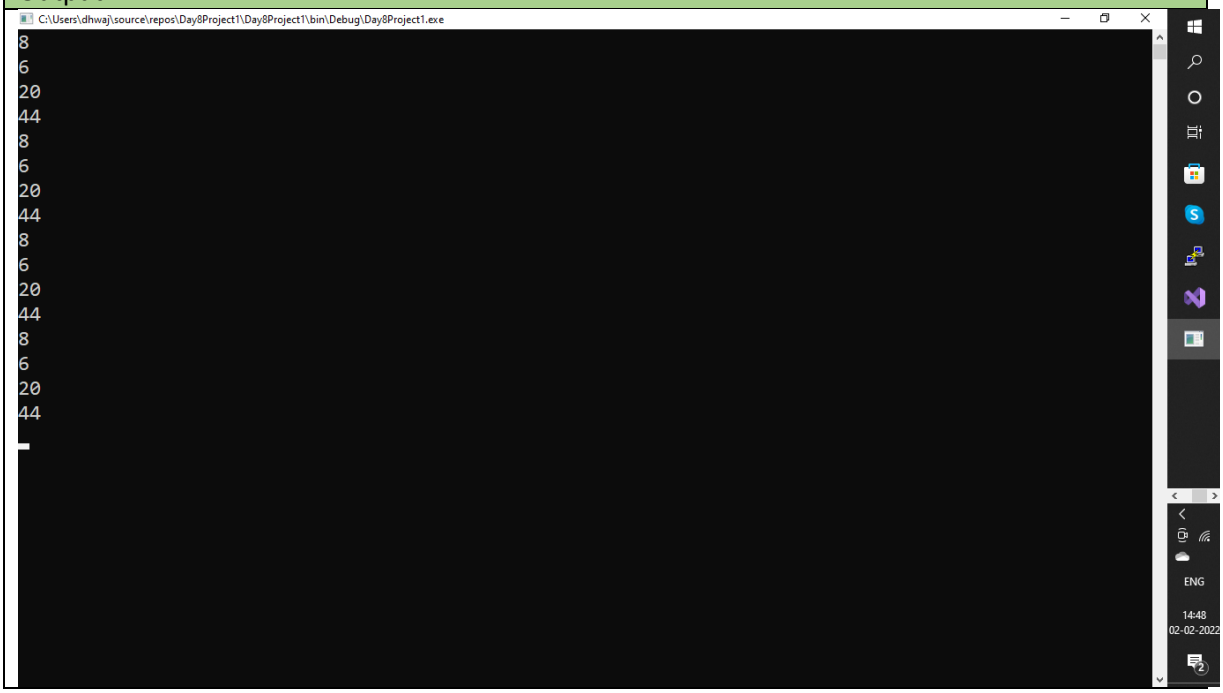
1.Declare and initialise a list with 8 variables.
Write for , foreach , Lambda expression, LINQ
To print even numbers.

Code:

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

namespace Day8Project1
{
    //Author:Rc
    /*Purpose:Declare and initialisation a list with 8 values,
     * write for ,foreach, lambda ,linq query
     * to print even numbers.
     * ******/
    internal class Program
    {
        static void Main(string[] args)
        {
            //Declaring and initialising List<integer type>
            List<int> data = new List<int> { 8, 9, 7, 6, 20, 77, 65, 44 };

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

            // foreach loop

            foreach(var d in data)
            {
                if (d % 2 == 0)
                    Console.WriteLine(d);
            }

            //Lambda Expression

            data.Where(d => d % 2 == 0).ToList().ForEach(d =>
Console.WriteLine(d));

            //LINQ
```

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

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

Output:



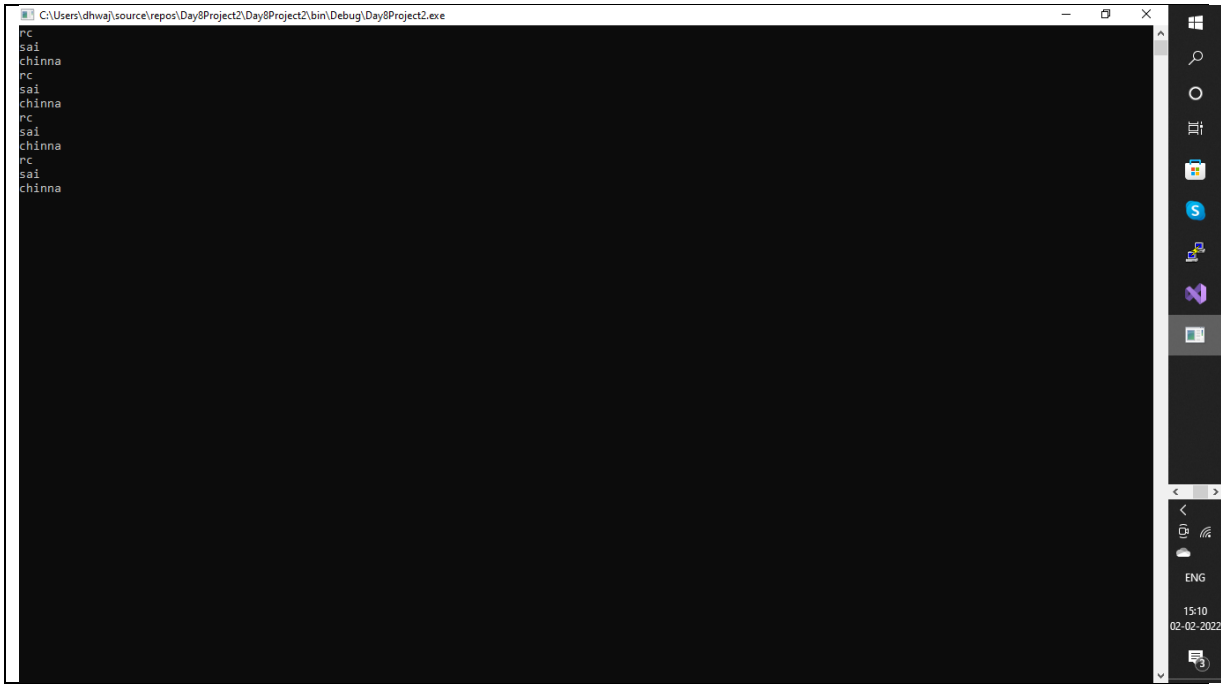
2.Create Employee class with 3 variables and
Create a List and write code
Using for, foreach, Lambda expression ,LINQ

Code:

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

namespace Day8Project2
{
    //Author: Rc
    /**Create Employee Class with 3 variables
     * create List of employees,
     * and write code using for,foreach,lambda expression,LINQ
     * *****/
    class Employee //class declaration
    {
        //variables declaration
        public int id;
        public string name;
```

```
        public int salary;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            //List<Employees> creation

            List<Employee> emp=new List<Employee>
            {
               //initialising object with values
            new Employee() { id = 501, name = "rc", salary = 5400},
            new Employee() { id = 502, name = "eswar", salary = 3000},
            new Employee() { id = 503, name = "sai",salary = 6500},
            new Employee() { id = 504, name = "pavan", salary = 5000},
            new Employee() { id = 505, name = "chinna", salary = 7000}
            };
            //for loop
            for (int i = 0; i < emp.Count; i++)
            {
                if(emp[i].salary>5000)
                Console.WriteLine(emp[i].name);
            }
            //foreach loop
            foreach (var e in emp)
            {
                if(e.salary>5000)
                Console.WriteLine(e.name);
            }

            //lambda expression

emp.Where(e=>e.salary>5000).ToList().ForEach(e=>Console.WriteLine(e.name));

            //LINQ

            var result = from e in emp
                         where e.salary > 5000
                         select e.name;

            result.ToList().ForEach(e => Console.WriteLine(e));

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

Output:



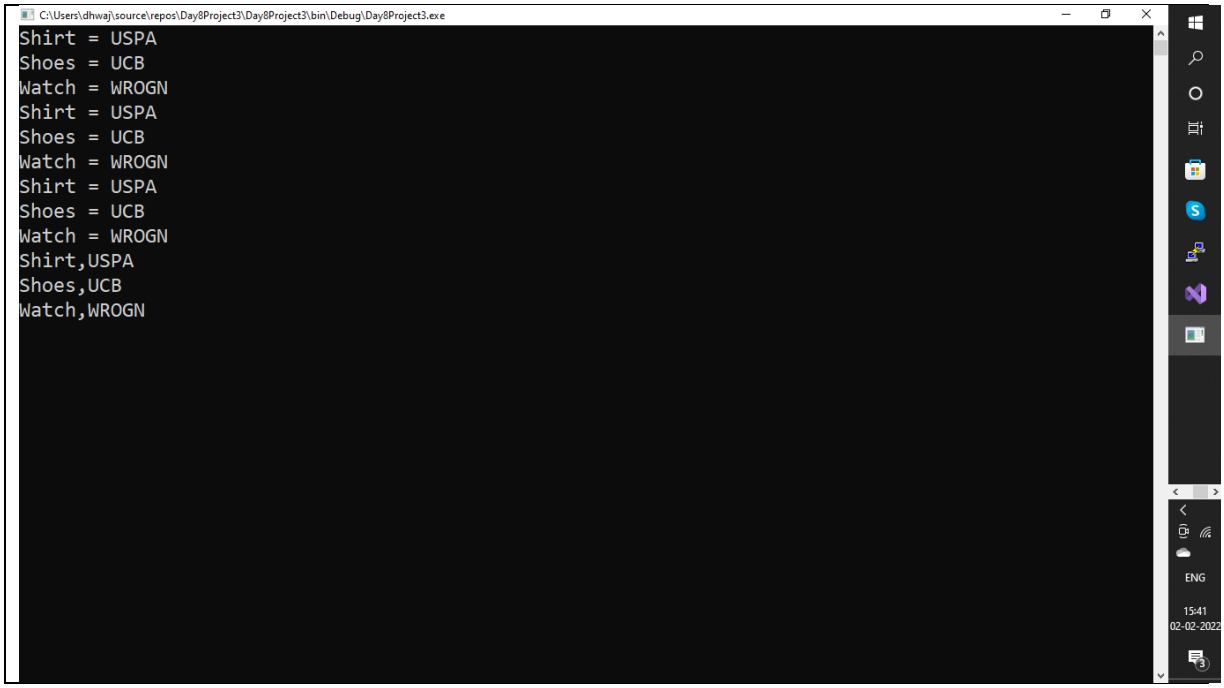
3. Create a Product class and add variables id,name,brand
Print product name and brand whose price>1000
Using for, foreach, Lambda Expression, LINQ

Code:

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

namespace Day8Project3
{
    using System;
    using System.Collections.Generic;
    using System.Linq;
    using System.Text;
    using System.Threading.Tasks;

    namespace Day7Project7
    {
        //Author: Rc
        /**Create Products Class and add variables id,name,price,brand
         * and write code to  print name and brand whose price >1000
         * using for,foreach,lambda expression,LINQ
         * *****/
        class Products //class declaration
```

```
        {
            //variables declaration
            public int id;
            public string name;
            public int price;
            public string brand;
        }
        internal class Program
        {
            static void Main(string[] args)
            {
                //object creation
                List<Products> p = new List<Products> //array object
                {
                    //initialising object with values
                    new Products() { id = 1, name = "Shirt",brand=
"USPA",price=2500},
                    new Products() { id = 2, name =
"Shoes",brand="UCB",price=3000},
                    new Products() { id = 3, name =
"Shorts",brand="Jockey",price=400},
                    new Products() { id = 4, name =
"Watch",brand="WROGN",price=1500},
                    new Products() { id = 5, name =
"Dairymilk",brand="Cadbury",price=5}
                };
                //for loop
                for (int i = 0; i < p.Count; i++)
                {
                    if (p[i].price > 1000)
                        Console.WriteLine("{0} = {1} ", p[i].name, p[i].brand);
                }
                //foreach loop
                foreach (var e in p)
                {
                    if (e.price > 1000)
                        Console.WriteLine("{0} = {1} ",e.name,e.brand);
                }

                //lambda expression
                p.ToList().Where(e => e.price > 1000).ToList().ForEach(e =>
Console.WriteLine("{0} = {1} ", e.name, e.brand));

                //LINQ

                var result=from e in p
                           where e.price>1000
                           select e.name + "," + e.brand;

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


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

Output:



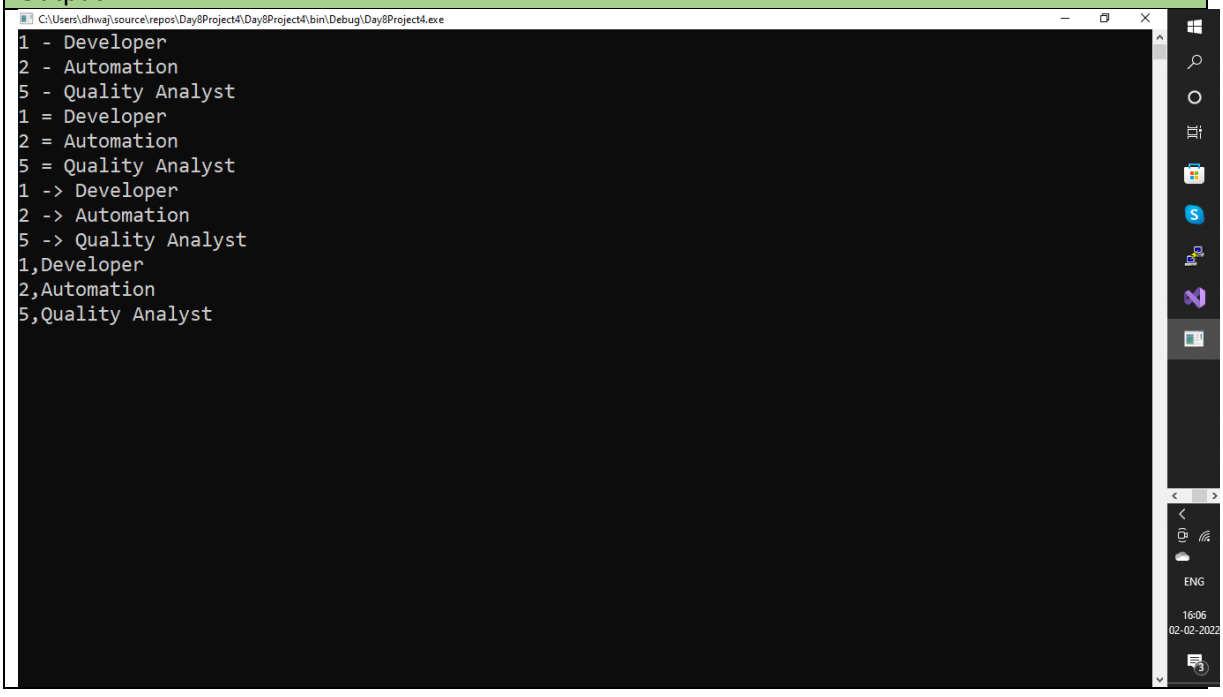
4.Create a Department Class and add variables id,name,empcount
Write code to print id ,name of departmets whose empcount >50
Using for,foreach, Lambda Expression, LINQ

Code:

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

namespace Day8Project4
{
    //Author: Rc
    /**Create Department Class and add variables id,name,empcount
     * and write code to  print id and name  whose emp >50
     * using for,foreach,lambda expression,LINQ
     * *****/
    class Department //class declaration
    {
        //variables declaration
        public int id;
        public string name;
        public int empcount;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            //List creation
            List<Department> data = new List<Department>
                {
                    //initialising  values
                    new Department() { id = 1, name="Developer",empcount=80},
                    new Department() { id = 2, name =
"Automation",empcount=60},
```

```
                    new Department() { id = 3, name = "Production
Support",empcount=40},
                    new Department() { id = 4, name = "Security",empcount=50},
                    new Department() { id = 5, name = "Quality
Analyst",empcount=70}
                };
            //for loop
            for (int i = 0; i < data.Count; i++)
            {
                if (data[i].empcount > 50)
                    Console.WriteLine("{0} - {1} ", data[i].id, data[i].name);
            }
            //foreach loop
            foreach (var d in data)
            {
                if (d.empcount > 50)
                    Console.WriteLine("{0} = {1} ", d.id, d.name);
            }

            //lambda expression
            data.ToList().Where(e => e.empcount > 50).ToList().ForEach(e =>
Console.WriteLine("{0} -> {1} ", e.id, e.name));

            //LINQ

            var result = from e in data
                         where e.empcount > 50
                         select e.id + "," + e.name;

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


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

Output:



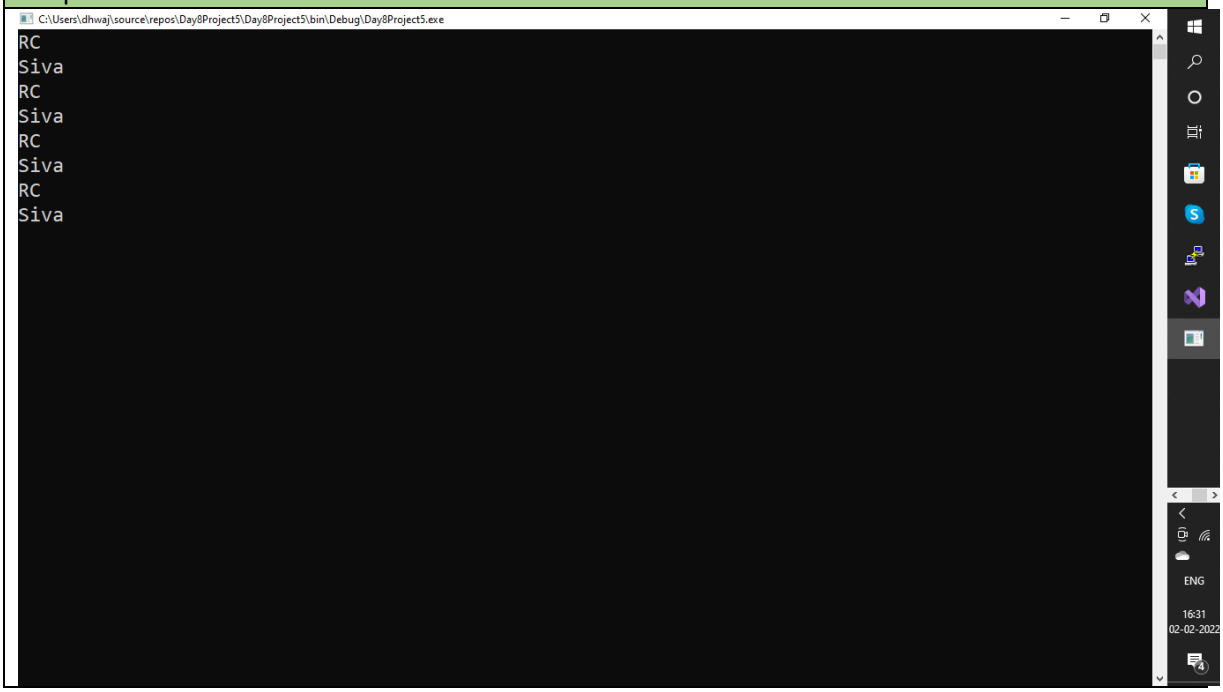
5.Create your own class and variables and initialise with some values
Using for, foreach , Lambda Expression ,LINQ

Code:

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

namespace Day8Project5
{
    //Author: Rc
    /**Create  own Class and add variables
     * and write code to  print name  whose mutuals==1
     * using for,foreach,lambda expression,LINQ
     * *****/
    class Friends //class declaration
    {
        //variables declaration
        public string name;
        public int age;
        public int mutuals;
    }
    internal class Program
    {
        static void Main(string[] args)
        {
            //List creation
            List<Friends> data = new List<Friends>
                {
                    //initialising  values
                    new Friends() { age= 22, name="RC",mutuals=1},
                    new Friends() { age= 24, name = "Siva",mutuals=1},
                    new Friends() { age= 23, name = "Chandu",mutuals=4},
                    new Friends() { age= 24, name = "Satya",mutuals=5},
                    new Friends() { age= 23, name = "Ramya",mutuals=7}
                };
            //for loop
            for (int i = 0; i < data.Count; i++)
            {
                if (data[i].mutuals==1)
                    Console.WriteLine( data[i].name);
            }
            //foreach loop
            foreach (var d in data)
            {
                if (d.mutuals==1)
                    Console.WriteLine(d.name);
            }

            //lambda expression
            data.ToList().Where(e => e.mutuals==1).ToList().ForEach(e =>
Console.WriteLine(e.name));

            //LINQ

            var result = from e in data
                         where e.mutuals==1
                         select e.name;
```

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


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

Output:



End of DAY 8 ASSIGNMENTS