Day 8
Assignment
By
M Mary Margarette

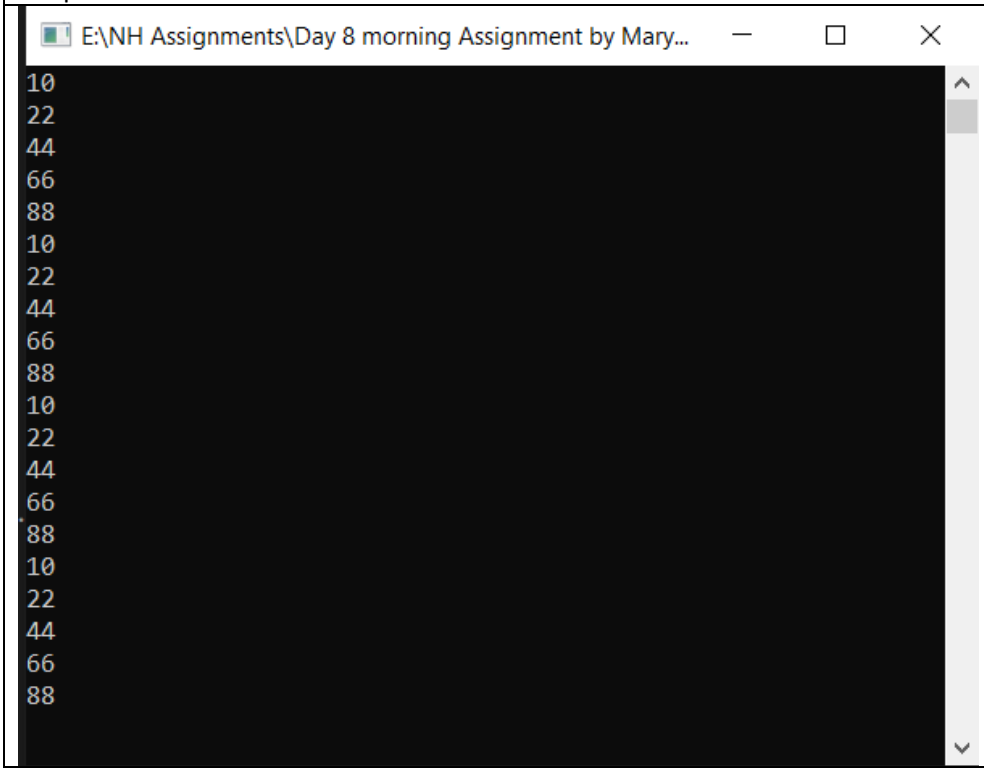
Declare and initialize a list with 8 values.
Write for loop, foreach loop, lambda, LINQ to even numbers

Code:

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

namespace Day_8_Project_1
{
   internal class Program
   {
      //Author: Mary Margaret
      //create list and using for loop, foreach loop, lambda expression and LINQ query find even
numbers
      static void Main(string[] args)
      {
         List<int> data = new List<int>() { 10, 22, 33, 44, 55, 66, 77, 88};

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

         //foreach loop to print even numbers from list
         foreach(var d in data)
         {
            if(d % 2 == 0)
            Console.WriteLine(d);
         }


         //lambda expression to print even numbers from list
         data.Where(d=>d%2==0).ToList().ForEach(d => Console.WriteLine(d));

         //LINQ query to print even numbers from list
         var result=from d in data
                    where d%2==0
```

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

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

Output:



Create Class Employee with 3 variables and using for loop, foreach loop, lambda expression and LINQ query find out Employes who earn more than 5000

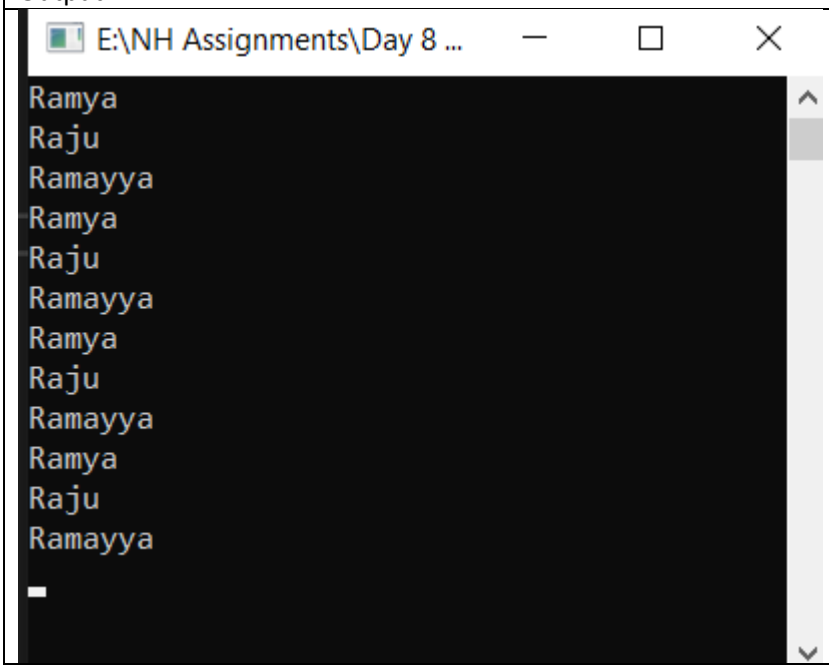
Code:

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

namespace Day_8_Project_2
{
   //Author: Mary Margaret
```

```
   //Create Class Employee with 3 variables
   //and using for loop, foreach loop, lambda expression and LINQ query find out Employes who earn more than 5000
   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 = 202, name = "Ramya", salary = 8000 },
            new Employee() { id = 203, name = "Raju", salary = 6500 },
            new Employee() { id = 204, name = "Raghav", salary = 3000 },
            new Employee() { id = 205, name = "Ramayya", salary = 5500 },
            new Employee() { id = 206, name = "Rajesh", salary = 2000 }
         };
         //for loop for whose salary >5000
         for (int i=0; i < employees.Count; i++)
         {
            if(employees[i].salary > 5000)
            {
               Console.WriteLine(employees[i].name);
            }
         }

         //foreach loop for whose salary >5000
         foreach(var e in employees)
         {
            if(e.salary>5000)
               Console.WriteLine(e.name);
         }

         //lambda expression for whose salary >5000
         employees.Where(e => e.salary > 5000).ToList().ForEach(e => Console.WriteLine(e.name));


         //LINQ query to print even numbers from list

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

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

        Console.ReadLine();


    }
  }
}
```

Output:



Create Class Product with 4 variables and using for loop, foreach loop, lambda expression and LINQ query print name and brand whose price is >50

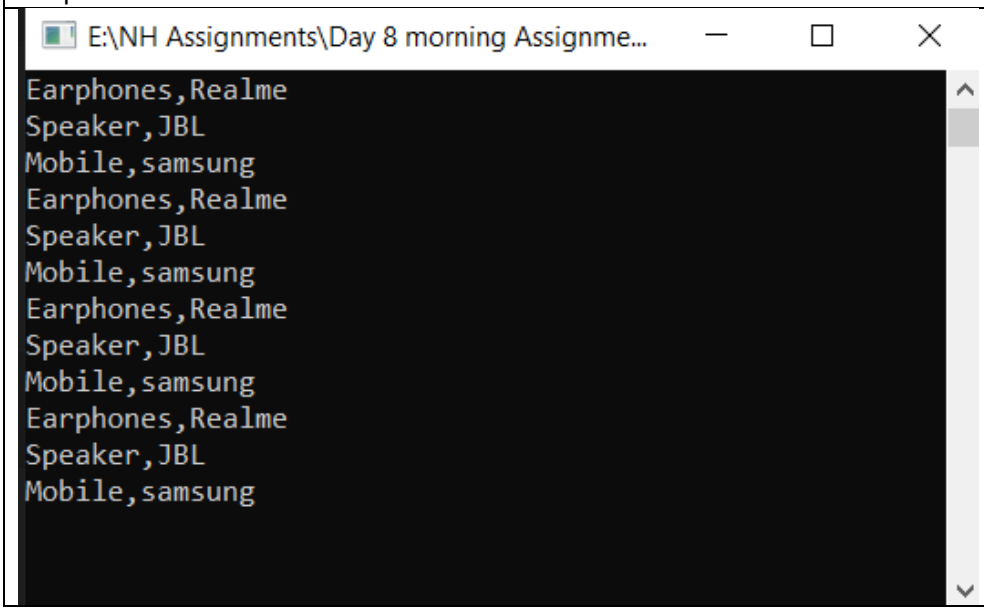
Code:

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


namespace Day_8_Project_3

{
```

```
//Author: Mary Margaret
//Create Class Product with 4 variables
//and using for loop, foreach loop, lambda expression and LINQ query print name and brand whose price is >50

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 = 362, name = "Earphones", price = 800, brand="Realme" },
            new Product() { id = 363, name = "Speaker", price = 3200, brand="JBL" },
            new Product() { id = 364, name = "Mobile", price = 9000, brand="samsung" },
            new Product() { id = 365, name = "Notebook", price = 45, brand="classmate" }

        };

        //for loop for which price >50

        for (int i = 0; i < products.Count; i++)
        {
            if (products[i].price > 50)
            {
                Console.WriteLine(products[i].name + "," + products[i].brand);
            }
        }


        //foreach loop for which price >50
        foreach (var p in products)
        {
            if (p.price > 50)
            {
                Console.WriteLine(p.name + "," + p.brand);
            }
```

```
        }


        //lambda expression for which price >50
        products.Where(p => p.price > 50).ToList().ForEach(p => Console.WriteLine(p.name + "," +
p.brand));


        //LINQ query for which price >50

        var result = from p in products
                     where p.price > 50
                     select p.name + "," + p.brand;
        result.ToList().ForEach(d => Console.WriteLine(d));


        Console.ReadLine();
    }

  }

}
```

Output:



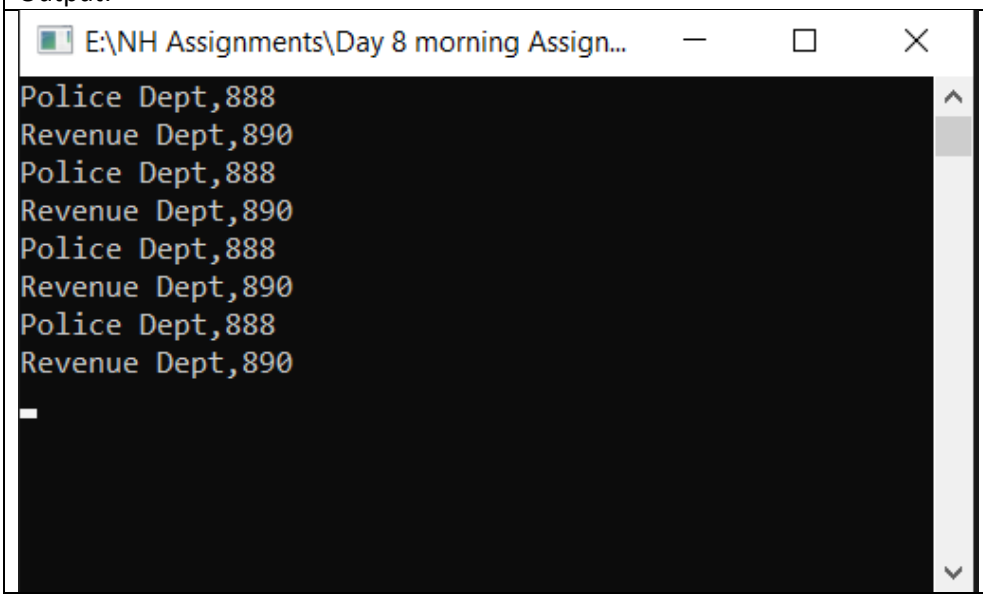
Create Class Department with 3 variables and using for loop, foreach loop, lambda expression and LINQ query print name and id whose emp count is >50

Code:

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


namespace Day_8_Project_4

{
   //Author: Mary Margaret
   //Create Class Department with 3 variables
   //and using for loop, foreach loop, lambda expression and LINQ query print name and id whose emp count is >50

   class Department

   {
      public int id;
      public string name;
      public int empcount;
   }

   internal class Program

   {
      static void Main(string[] args)

      {
         List<Department> dept = new List<Department>()
         {
            new Department() { id = 888, name = "Police Dept", empcount = 80},
            new Department() { id = 889, name = "Medical Dept", empcount = 30},
            new Department() { id = 890, name = "Revenue Dept", empcount = 59},
            new Department() { id = 891, name = "Municipal Dept", empcount = 36}

         };

         //for loop for which empcount >50

         for (int i = 0; i < dept.Count; i++)
         {
            if (dept[i].empcount > 50)
            {
               Console.WriteLine(dept[i].name + "," + dept[i].id);
            }
         }
```

```
        //foreach loop for which empcount >50
        foreach (var d in dept)
        {
           if (d.empcount > 50)
           {
              Console.WriteLine(d.name + "," + d.id);
           }
        }


        //lambda expression for which empcount >50
        dept.Where(d => d.empcount > 50).ToList().ForEach(d => Console.WriteLine(d.name + "," +
d.id));



        //LINQ query for which empcount >50

        var result = from d in dept
                     where d.empcount > 50
                     select d.name + "," + d.id;
        result.ToList().ForEach(d => Console.WriteLine(d));


        Console.ReadLine();
     }

  }

}
```

Output:

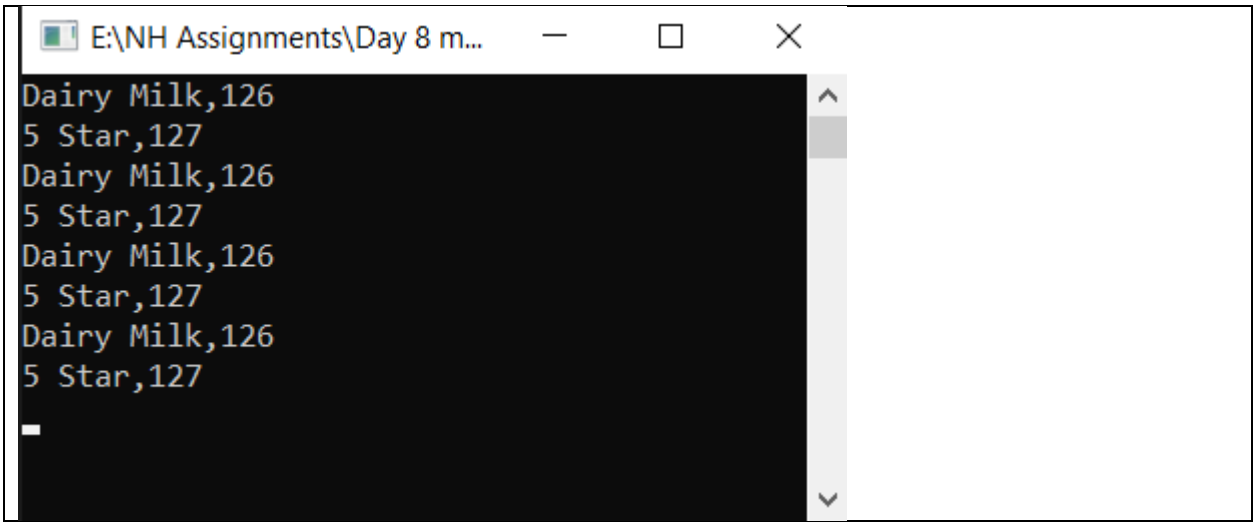


Create Class Chocolates with 3 variables and using for loop, foreach loop, lambda expression and LINQ query print name and id whose price is >75
Code:

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


namespace Day_8_Project_5

{
   //Author: Mary Margaret
   //Create Class Chocolates with 3 variables
   //and using for loop, foreach loop, lambda expression and LINQ query print name and id whose price is >75

   class Chocolate

   {
      public int id;
      public string name;
      public int price;
   }

   internal class Program

   {
      static void Main(string[] args)

      {
         List<Chocolate> choc = new List<Chocolate>()
         {
            new Chocolate() { id = 125, name = "Bounty", price = 20},
            new Chocolate() { id = 126, name = "Dairy Milk", price = 80 },
            new Chocolate() { id = 127, name = "5 Star", price = 78},
            new Chocolate() { id = 128, name = "Munch", price = 10}

         };

         //for loop for which price >50
```

```
        for (int i = 0; i < choc.Count; i++)
        {
           if (choc[i].price > 50)
           {
              Console.WriteLine(choc[i].name + "," + choc[i].id);
           }
        }


        //foreach loop for which price >50
        foreach (var c in choc)
        {
           if (c.price > 50)
           {
              Console.WriteLine(c.name + "," + c.id);
           }
        }


        //lambda expression for which price >50
        choc.Where(c => c.price > 50).ToList().ForEach(c => Console.WriteLine(c.name + "," + c.id));


        //LINQ query for which price >50

        var result = from c in choc
                     where c.price > 50
                     select c.name + "," + c.id;
        result.ToList().ForEach(c => Console.WriteLine(c));


        Console.ReadLine();
     }

  }

}
```

Output:


E:\NH Assignments\Day 8 m...
Dairy Milk,126
5 Star,127
Dairy Milk,126
5 Star,127
Dairy Milk,126
5 Star,127
Dairy Milk,126
5 Star,127