DAY8 MORNING ASSIGNMENT

BY

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PROJECT: 1

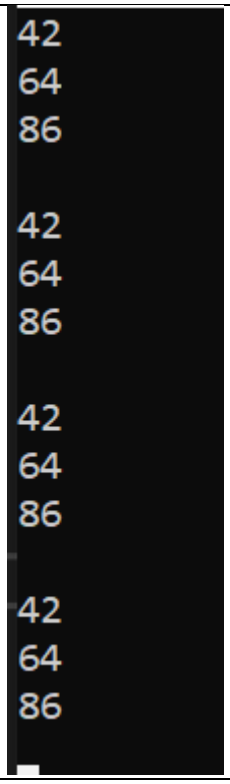
Declare and initialize a list with 8 values. write for loop, foreach loop, lambda, LINQ query to print even numbers

CODE:

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

namespace Day7Project3

{

   //**** DONE BY: PAVAN ****//

   //*** PURPOSE: FINDING EVEN NUMBERS USING 4 LOOPS****//

   internal class Program

   {
      static void Main (string [] args)

      {
         List<int> data = new List<int>() {42, 53, 64, 73, 86};

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

         //USING FOREACH LOOP//
         foreach(var d in data)
            {
            if(d%2==0)
            Console.WriteLine(d);
         }
         Console.ReadLine();
```

```
        // USING LAMBDA EXPRESSION//
        data.Where(d => d % 2 == 0).ToList().ForEach(d => Console.WriteLine(d));
        Console.ReadLine();

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



    }

  }

}
```

OUTPUT:



PROJECT2:

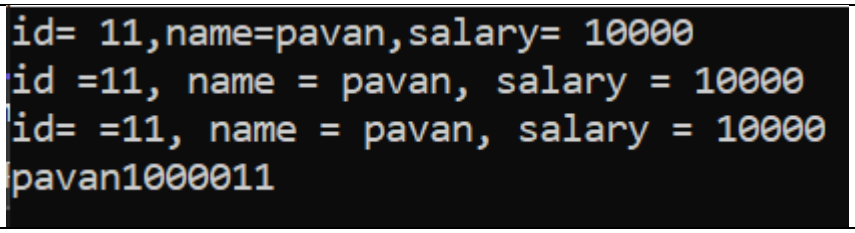
Create a class Employee with three variables as discussed in the class and create a list of Employees public int id; public string name;public int salary; USING; {FOR, FOREACH, LAMBDA, LINQ}

CODE:

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


namespace Day8Project2

{
   /// AUTHOR: PAVAN//
   /// PURPOSE: CREATING EMPLOYEE CLASS USING 4 LOOPS///

   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= "pavan",salary = 10000},

         };
         //USING FOR LOOP//
         for (int i = 0; i < employees.Count; i++)
         {

            Console.WriteLine($"id= {employees[i].id}, name={employees[i].name}, salary=
{employees[i].salary}");


            //USING FOREACH LOOP//
            foreach (var e in employees)
            {
               Console.WriteLine($"id ={e.id}, name = {e.name}, salary = {e.salary}");
```

```
            }
            //USING LAMBDA EXPRESSION//
            employees.ForEach(e => Console.WriteLine($"id= ={e.id}, name = {e.name}, salary =
{e.salary}"));


            //USING LINQ//
            var result = from e in employees
                         select e;
            result.ToList().ForEach(e => Console.WriteLine(e. name+e.salary+e.id));
            Console.ReadLine();
        }
    }

  }
}
```

OUTPUT:



PROJECT: 3

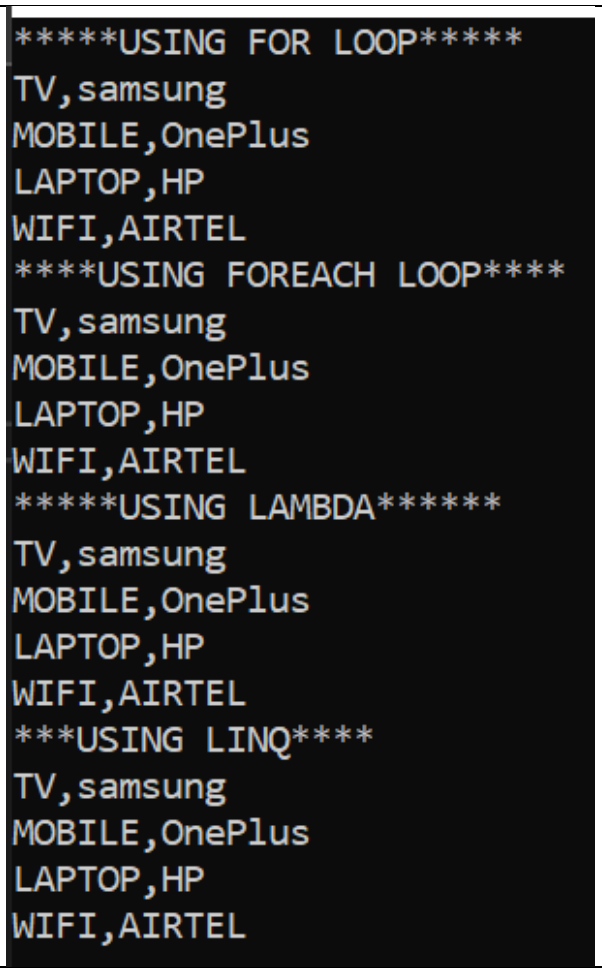
Create a class Product and add variables id, name, price, brand using For loop, foreach loop, lambda, LINQ.

CODE:

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

namespace Day8Project3
{
  class Product
  {
    public int id;
    public string name;
    public int price;
    public string brand;
  }
  internal class Program
  {
```

```
      static void Main(string[] args)
      {
         List<Product> product = new List<Product>()
         {
            new Product() {id = 1, name = "TV", price = 35000, brand = "Samsung"},
            new Product() {id = 2, name = "MOBILE", price = 12000, brand = "OnePlus"},
            new Product() {id = 3, name = "CLOTHES", price = 4500, brand = "Zara"},
            new Product() {id = 4, name = "LAPTOP", price = 40000, brand = "HP"},
            new Product() {id = 5, name = "WIFI", price = 5000, brand = "AIRTEL"},
            };
         //USING FOR LOOP//
         Console.WriteLine("*****USING FOR LOOP*****");
         for (int i = 0; i < product.Count; i++)
         {
            if (product[i].price >= 5000)
               Console.WriteLine($"{product[i].name}, {product[i].brand}");
         }

         //USING FOREACH LOOP//
         Console.WriteLine("****USING FOREACH LOOP****");
         foreach (Product p in product)
         {
            if (p.price >= 5000)
               Console.WriteLine($"{p.name},{p.brand}");
         }

         Console.WriteLine("*****USING LAMBDA******");
         //USING LAMBDA EXPRESSION//
         product.Where(p => p.price >= 5000).ToList().ForEach(p =>
Console.WriteLine($"{p.name},{p.brand}"));


         //USING LINQ EXPRESSION//
         Console.WriteLine("***USING LINQ****");
         var result= from p in product
                  where p.price >= 5000
                  select p;
         result.ToList().ForEach(p => Console.WriteLine($"{p.name},{p.brand}"));
            Console.ReadLine();
      }
   }
}
```

OUTPUT:



PROJECT:4

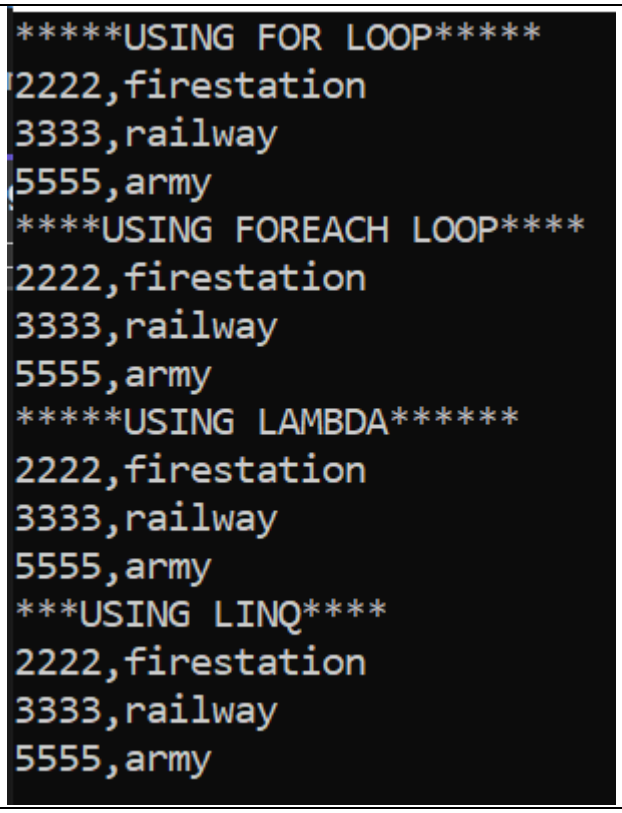
Create a department class and add variables .id, name, empcount write code to print id,name of departments whose empcount is greater than 50usingforforeachlambdaLINQ query

CODE:

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

namespace Day8Project4
{
   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 = 1111, name = "policestation",empcount= 50},
        new Department() {id = 2222, name = "firestation", empcount= 75},
        new Department() {id = 3333, name = "railway",empcount= 100},
        new Department() {id = 4444, name = "navy", empcount=55},
        new Department() {id = 5555, name = "army", empcount= 60},
        };
      //USING FOR LOOP//
      Console.WriteLine("*****USING FOR LOOP*****");
      for (int i = 0; i < dept. Count; i++)
      {
        if (dept[i].empcount >= 60)
          Console.WriteLine($"{dept[i].id}, {dept[i].name}");
      }

      //USING FOREACH LOOP//
      Console.WriteLine("****USING FOREACH LOOP****");
      foreach (Department d in dept)
      {
        if (d.empcount >= 60)
          Console.WriteLine($"{d.id}, {d.name}");
      }

      Console.WriteLine("*****USING LAMBDA******");
      //USING LAMBDA EXPRESSION//
      dept. Where(d => d.empcount >= 60).ToList().ForEach(d => Console.WriteLine($"{d.id},
{d.name}"));


      //USING LINQ EXPRESSION//
      Console.WriteLine("***USING LINQ****");
      var result = from d in dept
            where d.empcount >= 60
            select d;
      result.ToList().ForEach(d => Console.WriteLine($"{d.id}, {d.name}"));
      Console.ReadLine();
    }
  }
}
```

OUTPUT:



PROJECT: 5

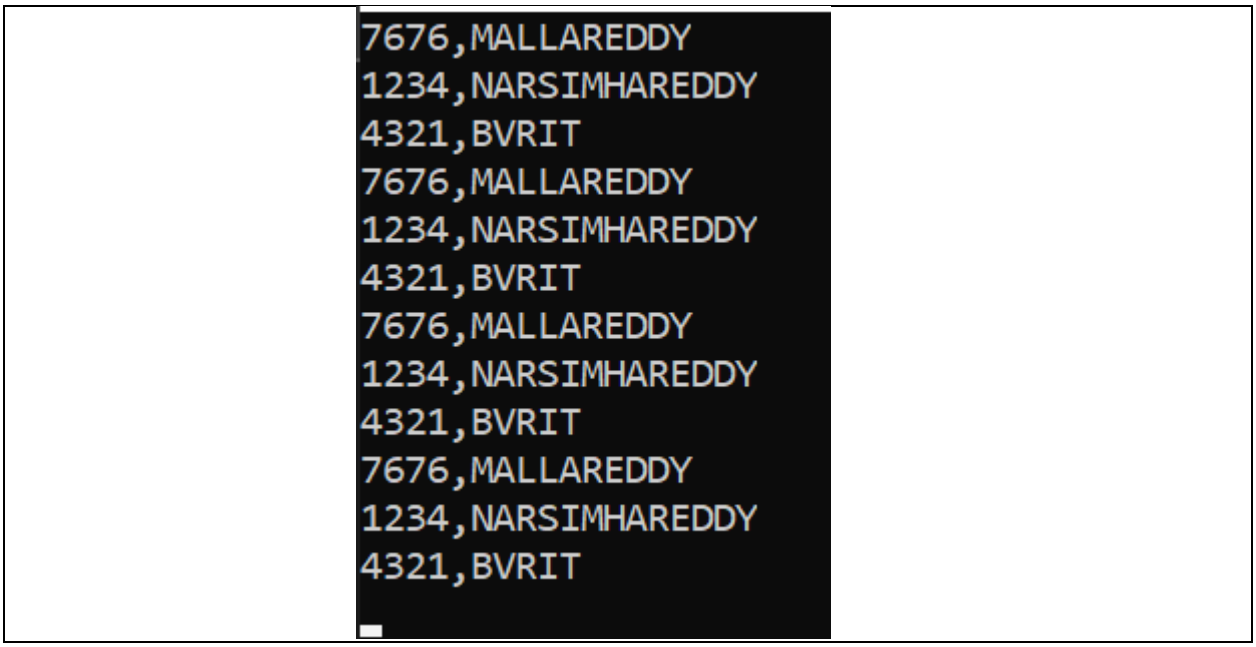
Create your own class and variables and initialize with some valuesforforeachlambdaLINQ query

CODE:

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

namespace Day8Project5
{
   //*** Done BY: PAVAN****//
   //*** PURPOSE: CREATING A CLASS USING 4 LOOP CONCEPTS: ****//
   class College
   {
      public int id;
      public string city;
      public int count;
   }
```

```
internal class Program
{
    static void Main(string[] args)
    {
        List<College> stu = new List<College>()
        {
            new College() { id = 7676, city ="MALLAREDDY",count = 155},
             new College() { id = 1234, city ="NARSIMHAREDDY",count = 165},
              new College() {id = 4321, city ="BVRIT",count = 175},
               new College() {id = 9999, city ="CBIT",count = 115},
                new College() {id = 5678, city ="MLRIT",count = 95},
                };
        //USING FOR LOOP//

        for (int i = 0; i < stu.Count; i++)
        {
            if (stu[i].count >= 150)
                Console.WriteLine($"{stu[i].id},{stu[i].city}");
        }
        //USING FOREACH LOOP//
        foreach (College s in stu)
        {
            if (s.count >= 150)
                Console.WriteLine($"{s.id},{s.city}");
        }

        //USING LAMBDA//
        stu.Where(s => s.count >= 150).ToList().ForEach(s => Console.WriteLine($"{s.id},{s.city}"));

        //USING LINQ EXPRESSION//

        var result = from s in stu
                     where s.count >=150
                     select s;
        result.ToList().ForEach(s => Console.WriteLine($"{s.id},{s.city}"));
        Console.ReadLine();
    }
}
```

OUTPUT:


7676,MALLAREDDY
1234,NARSIMHAREDDY
4321,BVRIT
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4321,BVRIT
7676,MALLAREDDY
1234,NARSIMHAREDDY
4321,BVRIT

**********THE END**********