Day 8 Assignment-02 Feb 2022

by K Sanjay

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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 Day\_8\_mng2ndfeb2022\_project\_1  {  internal class Program  {  static void Main(string[] args)  {  List<int> data = new List<int>() { 1, 2, 3, 4, 5, 6, 7, 8 };  // using for loop  for(int i=0;i<data.Count;i++)  {  if(data[i]%2==0)  Console.WriteLine(data[i]);  }  // using forach loop  foreach(var d in data)  {  if(d%2==0)  Console.WriteLine(d);  }  // using lambda expression  data.Where(d => d % 2 == 0).ToList().ForEach(d => Console.WriteLine(d));  // using LINQ Query  var result = from d in data  where d % 2 ==0  select d;  result.ToList().ForEach(d => Console.WriteLine(d));  Console.ReadLine();  }  }  } |
| Output |
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| 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 Day8Project3  {  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 = 101, name = "Ajay", salary = 15000 },  new Employee() { id = 102, name = "Kiran", salary = 10000 },  new Employee() { id = 103, name = "vijay", salary = 20000 },  new Employee() { id = 104, name = "madhu", salary = 30000 },  new Employee() { id = 105, name = "rishu", salary = 40000 },  };  // using forloop  for (int i = 0; i < employees.Count; i++)  {  Console.WriteLine($"id={employees[i].id},name={employees[i].name}, salary={employees[i].salary}");  }  // using foreach  foreach (var e in employees)  {  Console.WriteLine($"id ={e.id}, name={e.name}, salary={e.salary}");  }  // using Lambda  employees.ToList().ForEach(e => Console.WriteLine($"id{e.id}, name={e.name}, salary={e.salary}"));  // using LINQ  var result = from e in employees  select e;  result.ToList().ForEach(e => Console.WriteLine($"id{e.id},name={e.name},salary={e.salary}"));  Console.ReadLine();  }  }  } |
| Output |
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| 3. Create a class Product and add variables  id, name, price, brand  print product (name and brand) whose price is more than 500  using  for  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  {  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 = "iphnoe", price = 40000, brand="Apple" },  new Product(){id=2, name = "Galaxy", price = 50000, brand= "Samsung" },  new Product(){id=3, name = "Nord", price=10000, brand = "Oneplus" },  new Product(){id=4, name = "Redmi", price=60000, brand="Mi" },    };  // using forloop  for (int i = 0; i < product.Count; i++)  {  if (product[i].price > 40000)  Console.WriteLine($"Name={product[i].name}, Brand={product[i].brand}");  }  // using foreach loop  foreach (var p in product)  {  if (p.price > 40000)  Console.WriteLine($"Name={p.name}, Brand={p.brand}");  }  // using Lambda Expression  product.ToList().Where(p => p.price > 40000).ToList().ForEach(p => Console.WriteLine($"Name={p.name}, Brand={p.brand}"));  // using LinQ Query  var result = from p in product  where p.price > 40000  select p;  result.ToList().ForEach(p => Console.WriteLine($"Name={p.name}, Brand={p.brand}"));  Console.ReadLine();  }  }  } |
| Output |
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| 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 |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day8Project3  {  class Department  {  public int id;  public string name;  public int empcount;  }  internal class Program  {  static void Main(string[] args)  {  Department[] department = new Department[]  {  new Department(){ id = 1, name ="Welders",empcount=51},  new Department(){ id = 2, name ="Casting",empcount =30},  new Department(){ id = 3, name ="engine operators", empcount =100},  new Department(){ id = 4, name ="lab technicians", empcount=29},  new Department(){ id = 5, name ="professors",empcount=(63)}  };  // using for loop  for (int i = 0; i < department.Length; i++)  {  if (department[i].empcount > 50)  Console.WriteLine($"id={department[i].id},name={department[i].name}");  }  // using foreach  foreach (var e in department)  {  if (e.empcount > 50)  Console.WriteLine($"id={e.id},name={e.name}");  }  // using lambda  department.ToList().Where(e => e.empcount > 50).ToList().ForEach(e => Console.WriteLine($"id={e.id},name={e.name}"));  // using LINQ  var result = from e in department  where e.empcount > 50  select e;  result.ToList().ForEach(e => Console.WriteLine($"id={e.id},name={e.name}"));  Console.ReadLine();  }  }  } |
| Output |
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| 5. Create your own class and variables and  initialize with some values  for  foreach  lambda  linq query |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day8Project3  {  class Course  {  public int id;  public string name;  public int price;  }  internal class Program  {  static void Main(string[] args)  {  List<Course> course = new List<Course>()  {  new Course(){ id = 1, name ="Animation",price=2000},  new Course(){ id = 2, name ="Photoshop",price =3000},  new Course(){ id = 3, name ="Python", price =1000},  new Course(){ id = 4, name ="Data science", price=2900},  new Course(){ id = 5, name ="SAP",price=(6300)}  };  // using for loop  for (int i = 0; i < course.Count; i++)  {  Console.WriteLine($"id={course[i].id},name={course[i].name}, price={course[i].price}");  }  // using foreach  foreach (var c in course)  {  Console.WriteLine($"id ={c.id}, name={c.name}, price={c.price}");  }  // using lambda  course.ToList().ForEach(c => Console.WriteLine($"id{c.id}, name={c.name}, price={c.price}"));  // using LINQ  var result = from c in course  select c;  result.ToList().ForEach(c => Console.WriteLine($"id{c.id},name={c.name},price={c.price}"));  Console.ReadLine();  }  }  } |
| Output |
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