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| **Day-8 Assignment**  **By**  **Bhanu Rama Krishna Prakash Jakkamsetti**  **2/2/2022** |

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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 Day8\_project1  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author:Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose:initialize list with 8 values  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/    internal class Program  {  static void Main(string[] args)  {  List<int> data = new List<int>() {11,27,24,26,45,99,84,50 };  //by using forloop  Console.WriteLine("for loop");  for (int i = 0; i <data.Count; i++)  {  if (data[i] % 2 == 0)  {  Console.WriteLine(data[i]);  }  }  //by using foreach loop  Console.WriteLine("foreach loop");  foreach (var d in data)  {  if (d%2==0)  {  Console.WriteLine(d);  }  }  //by using lambda expression  Console.WriteLine("lambda");  data.Where(d=>d%2==0).ToList().ForEach(d=>Console.WriteLine(d));  //using Linq  Console.WriteLine("linq");  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;  write  for loop  foreach loop  lambda expression  linq query |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day8\_project2  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author:Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose:create list of employee  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  class Employee  {  public int id;  public string name;  public int salary;    }  internal class Program  {  static void Main(string[] args)  {  List<Employee> data = new List<Employee>()  {  new Employee() { id = 1, name ="bhanu",salary =4500},  new Employee() { id = 2, name = "rama", salary = 6000 },  new Employee() { id = 3, name = "krishna", salary = 4000 },  new Employee() { id = 4, name = "prakash", salary = 8000 },  new Employee() { id = 5, name = "jakkamsetti", salary = 3000 }  };  //by using forloop  Console.WriteLine("for loop");  for (int i = 0; i < data.Count; i++)  {  if (data[i].salary > 5000)  {  Console.WriteLine(data[i].name);  }  }  //by using foreach loop  Console.WriteLine("foreach loop");  foreach (var d in data)  {  if (d.salary > 5000)  {  Console.WriteLine(d.name);  }  }  //by using lambda expression  Console.WriteLine("lambda");  data.Where(d => d.salary > 5000).ToList().ForEach(d => Console.WriteLine(d.name));  //using Linq  Console.WriteLine("linq");  var result = from d in data  where d.salary > 5000  select d.name;  result.ToList().ForEach(d => Console.WriteLine(d));  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 Day8\_project3  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author:Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose:create list of product  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  class Product  {  public int id;  public string name;  public int price;  public string brand;  }  internal class Program  {  static void Main(string[] args)  {  List<Product> data = new List<Product>()  {  new Product() { id = 1, name ="bhanu",price =450,brand="puma"},  new Product() { id = 2, name = "rama", price = 600,brand="nike" },  new Product() { id = 3, name = "krishna", price = 400,brand="reebok"},  new Product() { id = 4, name = "prakash", price = 800,brand="indianterrain" },  new Product() { id = 5, name = "jakkamsetti", price = 300,brand="LOL" }  };  //by using forloop  Console.WriteLine("for loop");  for (int i = 0; i < data.Count; i++)  {  if (data[i].price > 500)  {  Console.WriteLine($"name={data[i].name}, brand={data[i].brand}");  }  }  //by using foreach loop  Console.WriteLine("foreach loop");  foreach (var d in data)  {  if (d.price > 500)  {  Console.WriteLine($"name={d.name}, brand={d.brand}");  }  }  //by using lambda expression  Console.WriteLine("lambda");  data.Where(d => d.price > 500).ToList().ForEach(d => Console.WriteLine($"name={d.name}, brand={d.brand}"));  //using Linq  Console.WriteLine("linq");  var result = from d in data  where d.price > 500  select d.name + "--" + d.brand;  result.ToList().ForEach(d => Console.WriteLine(d));  Console.ReadLine();  }  }  } |
| Output: |
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| 4. Create a Department class and add variables id, name, empcount  write code to print id, name of departments whose empcount is greater than 50  using  for  foreach  lambda  linq query |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day8\_project4  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author:Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: create list of product  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  class Department  {  public int id;  public string name;  public int depcount;  }  internal class Program  {  static void Main(string[] args)  {  List<Department> data = new List<Department>()  {  new Department() { id = 1, name ="bhanu",depcount =45},  new Department() { id = 2, name = "rama", depcount = 60},  new Department() { id = 3, name = "krishna", depcount = 40},  new Department() { id = 4, name = "prakash", depcount = 80},  new Department() { id = 5, name = "jakkamsetti", depcount = 30}  };  //by using forloop  Console.WriteLine("for loop");  for (int i = 0; i < data.Count; i++)  {  if (data[i].depcount > 50)  {  Console.WriteLine($"name={data[i].id}, brand={data[i].name}");  }  }  //by using foreach loop  Console.WriteLine("foreach loop");  foreach (var d in data)  {  if (d.depcount > 50)  {  Console.WriteLine($"name={d.id}, brand={d.name}");  }  }  //by using lambda expression  Console.WriteLine("lambda");  data.Where(d => d.depcount > 50).ToList().ForEach(d => Console.WriteLine($"name={d.id}, brand={d.name}"));  //using Linq  Console.WriteLine("linq");  var result = from d in data  where d.depcount > 50  select d.id + "--" + d.name;  result.ToList().ForEach(d => Console.WriteLine(d));  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 Day8\_project5  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author:Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose:create list of whatsapp  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  class Whatsapp  {  public int number;  public string name;  public string type;  }  internal class Program  {  static void Main(string[] args)  {  List<Whatsapp> data = new List<Whatsapp>()  {  new Whatsapp { number = 1, name = "bhanu", type = "bussiness" },  new Whatsapp { number = 2, name = "rama", type = "private" },  new Whatsapp { number = 3, name = "krishna", type = "private" },  new Whatsapp { number = 4, name = "prakash", type = "bussiness" },  new Whatsapp { number = 5, name = "jakkamsettti", type = "private" },  };  //for loop  Console.WriteLine("for loop");  for (int i = 0; i < data.Count; i++)  {  if (data[i].type=="private")  {  Console.WriteLine($"number={data[i].number} , name={data[i].name}");  }  }  //foreach loop  Console.WriteLine("foreach loop");  foreach (var d in data)  if (d.type=="private")  {  Console.WriteLine($"number={d.number} , name={d.name}");  }  //lambda  Console.WriteLine("lambda");  data.Where(d => d.type == "private").ToList().ForEach(d => Console.WriteLine($"number={d.number} , name={d.name}"));  //linq  Console.WriteLine("linq");  var result=from d in data  where d.type=="private"  select d.number+"--"+d.name;  result.ToList().ForEach(d => Console.WriteLine(d));  Console.ReadLine();  }  }  } |
| Output: |
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