Day 8 Assignment By M.Pallavi

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| Program: 1. Declare and initialize a list with 8 values, write for loop, for each loop, lambda, linq query to print even numbers |
| Code:  using System;  using System.Linq;  namespace Day8  {  internal class Program  {  static void Main(string[] args)  {  int[] data = new int[] { 2, 4, 33, 44, 46, 57, 68, 87 };  for (int i = 0; i < data.Length; i++)  {  if (data[i]%2==0)  {  Console.WriteLine(data[i]);  }  }  foreach (int d in data)  {  if (d % 2 == 0)  {  Console.WriteLine(d);  }  }  data.Where(d=>d% 2 == 0).ToList().ForEach(d => Console.WriteLine(d));  var result = from d in data  where d % 2 == 0  select d;  result.ToList().ForEach(d => Console.WriteLine(d));  Console.WriteLine();  }  }  } |
| Ouput: |

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| **2. Create a class Employee with three variables as discussed in the class and create a list of Employees**  **write for loop,foreach loop,lambda expression,linq query** |
| code:  using System;  using System.Linq;  namespace Day7Project5  {  internal class Program  {  class Employee  {  public int empId;  public string empName;  public int empSalary;  }  static void Main(string[] args)  {  Employee[] employees = new Employee[]  {  new Employee(){empId = 1, empName = "pallavi", empSalary = 34000},  new Employee(){empId = 2, empName = "lasya", empSalary = 25000},  new Employee(){empId = 3, empName = "joshna", empSalary =33000},  new Employee(){empId = 4, empName = "anusha", empSalary = 35000},  new Employee(){empId = 5, empName = "Manoj", empSalary = 28000},  new Employee(){empId = 6, empName = "rani", empSalary = 20000}  };  for (int i = 0; i < employees.Length; i++)  {  Console.WriteLine($"Employee ID = {employees[i].empId}, Employee Name = {employees[i].empName}, Employee Salary = {employees[i].empSalary}");  }  foreach (var e in employees)  {  Console.WriteLine($"Employee.ID = {e.empId}, Employee.Name = {e.empName}, Employee.Salary = {e.empSalary}");  }  employees.ToList().ForEach(e => Console.WriteLine($"ID = {e.empId}, Name = {e.empName}, Salary = {e.empSalary}"));  Console.ReadLine();  var result = from d in employees  where d.empId !=null  select d;  result.ToList().ForEach(d => Console.WriteLine(d));  Console.WriteLine();  }  }  }  Output: |

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| Program 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.Linq;  namespace Day8  {  internal class Program  {  class product  {  public int Id;  public string Name;  public int price;  public string brand;  }  static void Main(string[] args)  {  product[] p = new product[]  {  new product(){Id = 1, Name = "mobile", price=570,brand = "Dell"},  new product(){Id = 2, Name = "laptop",price=300, brand = "lenovo"},  new product(){Id = 3, Name = "oven",price=309, brand = "philips"},  new product(){Id = 4, Name = "television",price=490, brand = "LG"},  new product(){Id = 5, Name = "refrigirator", price=690,brand = "whirlpool"},  };  Console.WriteLine("product list of price >500 using for loop");  for (int i = 0; i < p.Length; i++)  {  if (p[i].price > 500)  {  Console.WriteLine($" product Name = {p[i].Name}, product brand = {p[i].brand}");  }  }  Console.WriteLine("product list of price >500 using foreach loop");  foreach (var e in p)  {  if (e.price > 500)  {  Console.WriteLine($" product Name = {e.Name}, product brand = {e.brand}");  }  }  Console.WriteLine("product list of price >500 using lamda");  p.ToList().Where(e => e.price > 500).ToList().ForEach(e => Console.WriteLine($"ID = {e.Id}, brand = {e.brand}"));  Console.ReadLine();  Console.WriteLine("product list of price >500 using for loop");  var result = from d in p  where d.price > 500  select d;  result.ToList().ForEach(d => Console.WriteLine(d));  Console.WriteLine();  }  }  Output:     |  | | --- | | Program : 4. Create a Department class and add variables id,name,empcount.write code to print id,name of departments whose emp count is greater than 50 using for foreach lambda linq query | | Code: | | using System;  using System.Linq;  namespace Day7Project5  {  internal class Program  { ///< summary>  /// <program to print name and id of whose department count is >50</program>  /// </summary>  class Department  {  public int Id;  public string Name;  public int deptcount;  }  static void Main(string[] args)  {  Department[] d = new Department[]  {  new Department(){Id = 1, Name = "police",deptcount= 18 },  new Department(){Id = 2, Name = "teacher",deptcount= 70},  new Department(){Id = 3, Name = "advocate",deptcount= 82},  new Department(){Id = 4, Name = "lawyer",deptcount= 90},  };  Console.WriteLine(" department count > 50 using for loop");  for (int i = 0; i < d.Length; i++)  {  if (d[i].deptcount > 50)  Console.WriteLine($"Employee ID = {d[i].Id}, Employee Name = {d[i].Name}");  }  // Using For Each  Console.WriteLine(" department count > 50 using For Each Loop");  foreach (var e in d)  {  if (e.deptcount > 50)  Console.WriteLine($"ID = {e.Id}, Name = {e.Name}");  }  // Using Lambda Expression  Console.WriteLine(" department count > 50 using Lambda Expression");  d.ToList().Where(e => e.deptcount > 50).ToList().ForEach(e => Console.WriteLine($"ID = {e.Id}, Name = {e.Name}"));  Console.ReadLine();  }  }  } | | Ouput: |  |  | | --- | | 5. Create your own class and variables and initialize with some values for ,foreach, lambda, linq query | | Code:  using System;  using System.Linq;  namespace Day8  {  internal class Program  {  class Games  {  public int Id;  public string Name;  public string gamename;  }  static void Main(string[] args)  {  Games[] player = new Games[]  {  new Games(){Id = 1, Name = "p.v .sindhu", gamename ="shuttle"},  new Games(){Id = 2, Name = "ram", gamename = "carroms"},  new Games(){Id = 3, Name = "sachin", gamename = "cricket"},  new Games(){Id = 4, Name = "kohli", gamename = "cricket"},  new Games(){Id = 5, Name = "kapil", gamename = "volleyball"},  };  //playere list by using for loop  Console.WriteLine("player listby using for loop ");  for (int i = 0; i < player.Length; i++)  {  Console.WriteLine($"player id = {player[i].Id}, playerName = {player[i].Name}, gamename ={player[i].gamename}");  }  //player list by using foreach loop  Console.WriteLine("player listby using foreach loop ");  foreach (var e in player)  {  Console.WriteLine($"player id = {e.Id}, playerName = {e.Name}, gamename ={e.gamename}");  }  player.ToList().ForEach(e => Console.WriteLine($"player id = {e.Id}, playerName = {e.Name}, gamename ={e.gamename}"));  Console.ReadLine();  //player list by using LINQ  Console.WriteLine("player listby using LINQ ");  var result = from d in player  where d.Id != 0  select d;  //palyerv list using lamda expression.  Console.WriteLine("player listby using lamda loop ");  result.ToList().ForEach(e => Console.WriteLine(e));  Console.ReadLine();  }  }  } |   Output: |