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| **Day 8 Morning Assignment**  **By Manoj Yekolla**  **2-Feb-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  {  internal class Program  {  static void Main(string[] args)  {  List<int> data = new List<int>() { 12, 45, 98, 33, 67, 28, 47, 22 };  //Even Numbers using For Loop  for (int i=0;i<data.Count;i++)  {  if (data[i] %2 == 0)  Console.WriteLine(data[i]);    }  // using for each loop  foreach(var d in data)  {  if(d%2==0)  Console.WriteLine(d);  }  //using lamda expression  data.Where(d => d % 2 == 0).ToList().ForEach(d => Console.WriteLine(d));  //using linq  var result = from d in data  where d % 2 == 0  select d;  result.ToList().ForEach(e => Console.WriteLine(e));  Console.ReadLine();  }  }  } |
| Output :  Screenshot (122) |

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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  {  class Employee  {  public int id;  public string name;  public int salary;  }  internal class Program  {  static void Main(string[] args)  {  List<Employee> emp = new List<Employee>() {  new Employee() { id = 1, name = "manoj Yekolla", salary = 20000 },  new Employee() { id = 2, name = "murali", salary = 10000 },  new Employee() { id = 3, name = "Nithesh", salary = 5000 },  new Employee() { id = 4, name = "Munaswamy", salary = 27000 },  };  //using for loop    for (int i=0; i< emp.Count;i++)  {  Console.WriteLine($"id={emp[i].id},name={emp[i].name},salary={emp[i].salary}");  }  //using foreach loop  foreach (var e in emp)  {  Console.WriteLine($"id={e.id},name={e.name},salary={e.salary}");  }  //using lamda expression  emp.ToList().ForEach(e => Console.WriteLine($"id={e.id},name={e.name},salary={e.salary}"));  //using Linq  var result = from e in emp  select e;  result.ToList().ForEach(e => Console.WriteLine($"id={e.id},salary={e.salary},name={e.name}"));  Console.ReadLine();  }  }  } |
| Output :  Screenshot (124) |

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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 8,000**  **using**  **For ,foreach loop ,lamda ,linq query.** |
| Code : |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day8\_project3  {  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=1,name="Gabbar",price=6000,brand="moto mobile"},  new Product() {id=2,name="Manoj",price=10000,brand="Realme mobile"},  new Product() {id=3,name="Chandhra",price=12000,brand="MI mobile"},  new Product() {id=4,name="Jeevan",price=8000,brand="samsung mobile"},  };  // for loop  for(int i = 0; i < products.Count; i++)  {  if(products[i].price>8000)  Console.WriteLine($"name={products[i].name},brand={products[i].brand}");  }  //using foreach  foreach(var p in products)  {  if (p.price > 8000)  Console.WriteLine($"name={p.name},brand={p.brand}");  }  //lamda  products.ToList().Where(p => p.price > 8000).ToList().ForEach(p => Console.WriteLine($"name={p.name},brand={p.brand}"));  //linq  var result = from p in products  where p.price > 8000  select p;  result.ToList().ForEach(p => Console.WriteLine($"name={p.name},brand={p.brand}"));  Console.ReadLine();  }  }  } |
| Output :  Screenshot (126) |

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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 ,lamda, linq query ?** |
| Code : |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day8\_Project\_4  {  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=1,name="Gabbar",empcount=28},  new Department() {id=2,name="Manoj",empcount=50},  new Department() {id=3,name="Chandhra",empcount=69},  new Department() {id=3,name="Chandhra",empcount=39},  };  // for loop  for (int i = 0; i < dept.Count; i++)  {  if (dept[i].empcount > 50)  Console.WriteLine($"id={dept[i].id},name={dept[i].name}");  }  //using foreach  foreach (var p in dept)  {  if (p.empcount > 50)  Console.WriteLine($"id={p.id},name={p.name}");  }  //lamda  dept.ToList().Where(p => p.empcount > 50).ToList().ForEach(p => Console.WriteLine($"id={p.id},name={p.name}"));  //linq  var result = from p in dept  where p.empcount > 50  select p;  result.ToList().ForEach(p => Console.WriteLine($"id={p.id},name={p.name}"));  Console.ReadLine();  }  }  } |
| Output :  Screenshot (128) |

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| **5. Create your own class and variables and**  **initialize with some values using for , foreach,lamda, linq query ?** |
| Code : |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day8\_Project5  {  class Order  {  public int id;  public string custname;  public int OrderPrice;  public string CustAddress;  }  internal class Program  {  static void Main(string[] args)  {  List<Order> order = new List<Order>()  {  new Order() {id=1,custname="manojy",OrderPrice=500},  new Order() {id=2,custname="murali",OrderPrice=800},  new Order() {id=3,custname="krish",OrderPrice=1500},  new Order() {id=4,custname="suresh",OrderPrice=250},  };  //using for loop  for (int i=0;i<order.Count;i++)  {  Console.WriteLine($"id={order[i].id},custname={order[i].custname},orderprice={order[i].OrderPrice}");  }  //using foreach loop  foreach(var o in order)  {  Console.WriteLine($"id={o.id},custname={o.custname},orderprice={o.OrderPrice}");  }  //using lamda  order.ToList().ForEach(o => Console.WriteLine($"id={o.id},custname={o.custname},orderprice={o.OrderPrice}"));  //using linq  var result = from o in order  select o;  result.ToList().ForEach(o => Console.WriteLine($"id={o.id},custname={o.custname},orderprice={o.OrderPrice}"));  Console.ReadLine();  }  }  }  Output : |
| Screenshot (130) |