|  |
| --- |
| Day 7  Assignment  By  M. Mary Margarette |

|  |
| --- |
| Create Employee Class with three variables and two objects: |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day\_7\_Project\_1  {  //Author: Mary Margaret  /\*Purpose: Create Employee class with 3 variables and 2 methods \*/  class Employee  {  // variable declaration  private int id;  private string name;  private int salary;  //method declaration  public void ReadEmployee()  {  Console.WriteLine("Enter id:");  id = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter name:");  name = Console.ReadLine();  Console.WriteLine("Enter salary:");  salary = Convert.ToInt32(Console.ReadLine());  }  public void PrintEmployee()  {  Console.WriteLine($"id={id},name={name},salary={salary}");  }  }  internal class Program  {  static void Main(string[] args)  {  // object creation  Employee e = new Employee(); //e is object of Employee class    e.ReadEmployee();  e.PrintEmployee();  Console.ReadLine();  }  }  } |
| Output: |
|  |

------------------------------------------------------------------------------------------------------------------------------------------

|  |
| --- |
| Create Classes:   1. Customer 2. Product 3. Seller 4. Department |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day\_7\_Project\_2  {  //Author: Mary Margaret  /\*Purpose: creating Classes:  1. customer  2. product  3. seller  4. department  \*/  class Customer //Class Declaration  {  //variable Declaration  private int cid;  private string cname;  private int cnum;  //Methods Declaration  public void ReadCustomer()  {  Console.WriteLine("Enter Customer id:");  cid = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter Customername:");  cname = Console.ReadLine();  Console.WriteLine("Enter Customer mobile number:");  cnum = Convert.ToInt32(Console.ReadLine());  }  public void PrintCustomer()  {  Console.WriteLine($"CustomerId={cid}, Customername={cname}, Mobile number={cnum}");  }  }  class Products //Class Declaration  {  //variable Declaration  private int pid;  private string pname;  private string pbrand;  //Methods Declaration  public void ReadProduct()  {  Console.WriteLine("Enter Product id:");  pid = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter Product name:");  pname = Console.ReadLine();  Console.WriteLine("Enter Brand of product:");  pbrand = Console.ReadLine();  }  public void PrintProduct()  {  Console.WriteLine($"ProductId={pid}, Productname={pname}, ProductBrand={pbrand}");  }  }  class Seller //Class Declaration  {  //variable Declaration  private int sid;  private string sname;  private int snum;  //Methods Declaration  public void ReadSeller()  {  Console.WriteLine("Enter Seller id:");  sid = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter Seller name:");  sname = Console.ReadLine();  Console.WriteLine("Enter Seller mobile number:");  snum = Convert.ToInt32(Console.ReadLine());  }  public void PrintSeller()  {  Console.WriteLine($"SellerId={sid}, Sellername={sname}, SellerMobile number={snum}");  }  }  class Department //Class Declaration  {  //variable Declaration  private int did;  private string dname;  private string ddescription;  //Methods Declaration  public void ReadDepartment()  {  Console.WriteLine("Enter Department id:");  did = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter Department name:");  dname = Console.ReadLine();  Console.WriteLine("Enter Department Description: ");  ddescription = Console.ReadLine();  }  public void PrintDepartment()  {  Console.WriteLine($" DepartmentId={did}, Departmentname={dname}, DepartmentDescription={ddescription}");  }  }  internal class Program  {  static void Main(string[] args)  {  Customer a = new Customer();  a.ReadCustomer();  a.PrintCustomer();  Products b = new Products();  b.ReadProduct();  b.PrintProduct();  Seller c = new Seller();  c.ReadSeller();  c.PrintSeller();  Department d = new Department();  d.ReadDepartment();  d.PrintDepartment();  Console.ReadLine();  }  }  } |
| Output: |
|  |

-----------------------------------------------------------------------------------------------------------------------------------------

|  |
| --- |
| Create Employee class with 3 public variables. Create objects, initialize values, and print them. |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day\_7\_Project\_3  {  //Author: Mary Margaret  /\*Purpose: Create Employee class with 3 public variables.  \* Create Employee object and initialize. \*/  class Employee //Class Declaration  {  //public variable declaration  public int id;  public string name;  public int age;  }  internal class Program  {  static void Main(string[] args)  {  //Object declaration with initialization  Employee emp = new Employee() { id = 2602, name = "Margaret", age = 21 };  Console.WriteLine($"id={emp.id},name={emp.name},age={emp.age}");  Console.ReadLine();  }  }  } |
| Output: |
|  |

------------------------------------------------------------------------------------------------------------------------------------------

|  |
| --- |
| Create Employee Class and Create object and initialize with 5 values and use for loop, foreach loop, lambda expression. |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;    namespace Day\_7\_Project\_4  {  //Author: Mary Margaret  /\*Create Employee Class  \* Create object and initialize with 5 values and use for loop, foreach loop, lambda expression\*/  class Employee //class declaration  {  //variables declaration  public int id;  public string name;  public int salary;  }  internal class Program  {  static void Main(string[] args)  {  //object creation  Employee[] emp = new Employee[]  {  //initialising object with values  new Employee() { id = 1, name = "Margaret", salary = 5000},  new Employee() { id = 2, name = "Rajendra", salary = 6000},  new Employee() { id = 3, name = "Tejaswi", salary = 7000},  new Employee() { id = 4, name = "Samuel", salary = 8000},  new Employee() { id = 5, name = "Chandana", salary = 9000}  };  //for loop  for (int i = 0; i < emp.Length; i++)  {  Console.WriteLine($"id={emp[i].id},name={emp[i].name},salary={emp[i].salary}");  }  //foreach loop  foreach (var e in emp)  {  Console.WriteLine($"id={e.id},name={e.name},salary={e.salary}");  }  //lambda expression  emp.ToList().ForEach(e => Console.WriteLine($"id={e.id},name={e.name},salary={e.salary}"));  Console.ReadLine();  }    }  } |
|  |
|  |

------------------------------------------------------------------------------------------------------------------------------------------

|  |
| --- |
| Create Employee Class and create object and initialize with 5 values and write code to print employees who is getting salary >=5000 using for loop, foreach loop, lambda expression |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;    namespace Day\_7\_Project\_5  {  //Author: Mary Margaret  /\*Create Employee Class  \* create object and initialise with 5 values  \* and write code to print employees who is getting salary >=5000  \* using for loop,foreach loop, lambda expression\*/  class Employee //class declaration  {  //variables declaration  public int id;  public string name;  public int salary;  }  internal class Program  {  static void Main(string[] args)  {  //object declaration  Employee[] emp = new Employee[]  {  new Employee() { id = 1, name = "Margaret", salary = 8500},  new Employee() { id = 2, name = "Raj", salary = 6500},  new Employee() { id = 3, name = "Teja",salary = 5500},  new Employee() { id = 4, name = "Samuel", salary = 2200},  new Employee() { id = 5, name = "David", salary = 6300}  };  //for loop  for (int i = 0; i < emp.Length; i++)  {  if (emp[i].salary >= 5000)  Console.WriteLine($"id={emp[i].id},name={emp[i].name},salary={emp[i].salary}");  }  //foreach loop  foreach (var e in emp)  {  if (e.salary >= 5000)  Console.WriteLine($"id={e.id},name={e.name},salary={e.salary}");  }  //lambda expression  emp.ToList().Where(e => e.salary >= 5000).ToList().ForEach(e => Console.WriteLine($"id={e.id},name={e.name},salary={e.salary}"));  Console.ReadLine();  }  }  } |
| Output: |
|  |

------------------------------------------------------------------------------------------------------------------------------------------

|  |
| --- |
| Create object and initialize with 5 values and write code to print Customers whose count>=4 using for, foreach, lambda expression |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;    namespace Day\_7\_Project\_6  {  //Author: Mary Margaret  //create object and initialise with 5 values and write code to print Custormers whose count>=4 using for,foreach,lambda expression    class Customer //class declaration    {  //variables declaration    public int id;    public string name;    public int count;    }    internal class Program  {  static void Main(string[] args)  {  Customer[] c = new Customer[]  {  //initialising object with values  new Customer() { id = 10, name = "Ajith", count = 5},  new Customer() { id = 20, name = "Balu", count = 4},  new Customer() { id = 30, name = "Charitha",count = 3},  new Customer() { id = 40, name = "Naira", count = 5},  new Customer() { id = 50, name = "Samuel", count = 2}  };  //for loop  for (int i = 0; i < c.Length; i++)  {  if (c[i].count >= 4)  Console.WriteLine($"id={c[i].id},name={c[i].name},CustomerCount={c[i].count}");  }  //foreach loop  foreach (var d in c)  {  if (d.count >= 4)  Console.WriteLine($"id={d.id},name={d.name},CustomerCount={d.count}");  }  //lambda expression  c.ToList().Where(e => e.count >= 4).ToList().ForEach(e => Console.WriteLine($"id={e.id},name={e.name}, CustomerCount={e.count}"));  Console.ReadLine();  }  }  } |
| Output: |
|  |

------------------------------------------------------------------------------------------------------------------------------------------

Write 3 definitions of class and 4 points about object discussed in the class.

Class:

1.A class is a group of variables and methods.

2.A class is like a design to create objects.

3.A class consists of state and behavior.

Object:

1.An object is an instance of a class.

2.We can create any number of objects.

3.Objects are reference type.

4.Objects occupy memory.

------------------------------------------------------------------------------------------------------------

Pictorially represents class with multiple objects:

