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| **DAY 7 ASSIGNMENT**  **By**  **ARUN KUMAR YADLAPALLI**  **@**  **NB Healthcare Technologies PVT LTD.** |

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| **Q1)** Create employee class with three variables and two methods, Read employee and Print employee and create an object and call methods. |
| **Code:**  namespace Day\_7\_Project\_1  {  class Employees  {  public int Id;  public string name;  private int salary;    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}");  }  }  class Program  {  static void Main(string[] args)  {  Employees emp1 = new Employees();  emp1.ReadEmployee();  emp1.PrintEmployee();  Console.ReadLine();  }  }  } |
| **Output:** |

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| **Q2)** Write 3 definitions of Class and 4 points about Object . |
| **A) Class:**   * A class is group of variables and methods. * A class is like a design/blueprint to create objects. * A class consists of state and behaviour, where state talks about the variables and behaviour talks about the methods |
| **Object:**   * An object is an instance of a class. * We can create any no:of objects. * Objects occupy memory. * Objects are reference type. |

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| **Q3)** Pictorial representation of class and objects. |
| **Picture:** |

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| **Q4)** Create below classes   1. Customer 2. Product 3. Seller 4. Department |
| **Code:**  **Class Customer:**  namespace Day7\_Project2  {  class Customer\_class  {  private string Cstname;  private string Cstid;  private int Cstmbno;    public void ReadCustomers()  {  Console.WriteLine("Enter Cstname");  Cstname = Console.ReadLine();    Console.WriteLine("Enter Cstid");  Cstid = Console.ReadLine();    Console.WriteLine("Enter Cstmbno");  Cstmbno = Convert.ToInt32(Console.ReadLine());  }    public void PrintCustomers()  {  Console.WriteLine($"Cstname={Cstname},Cstid={Cstid},Cstmbno={Cstmbno}");  }  }  }  **Class Product:**  namespace Day7\_Project2  {  class Product  {  private string name;  private int mftyear;  private string type;    public void ReadProduct()  {  Console.WriteLine("enter name");  name = Console.ReadLine();    Console.WriteLine("enter mftyear");  mftyear =Convert.ToInt32( Console.ReadLine());    Console.WriteLine("enter type");  type = Console.ReadLine();  }    public void PrintProduct()  {  Console.WriteLine($"name={name},mftyear={mftyear},type={type}");  }  }  }  **Class Seller:**  namespace Day7\_Project2  {  class Seller\_Class  {  private string id;  private string name;  private string location;    public void ReadSeller()  {  Console.WriteLine("enter id");  id = Console.ReadLine();    Console.WriteLine("enter name");  name = Console.ReadLine();    Console.WriteLine("enter location");  location = Console.ReadLine();    }    public void PrintSeller()  {  Console.WriteLine($"id={id},name={name},location={location}");  }  }  }  **Class Department:**  namespace Day7\_Project2  {  class Department  {  private string name;  private string id;  private int code;    public void ReadDepartment()  {  Console.WriteLine("enter name");  name = Console.ReadLine();    Console.WriteLine("enter id");  id = Console.ReadLine();    Console.WriteLine("enter code");  code = Convert.ToInt32(Console.ReadLine());  }    public void PrintDepartment()  {  Console.WriteLine($"name={name},id={id},code={code}");  }  }  }  **Main class , Creating Objects:**  namespace Day7\_Project2  {  class Program  {  static void Main(string[] args)  {  Customer\_class Cst = new Customer\_class();  Cst. ReadCustomers();  Cst. PrintCustomers();    Product Pdt = new Product();  Pdt.ReadProduct();  Pdt.PrintProduct();    Seller\_Class Sell = new Seller\_Class();  Sell.ReadSeller();  Sell.PrintSeller();    Department Dpt = new Department();  Dpt.ReadDepartment();  Dpt.PrintDepartment();    Console.ReadLine();      }  }  } |
| **Output :** |

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| **Q5)** Create employee class with 3 public variables. Also create employee object and initialize with values while creating object and print the values. |
| **Code:**  namespace Day7\_Project3  {  class Employee  {  public int id;  public string name;  public int salary;  }  class Program  {  static void Main(string[] args)  {  Employee emp = new Employee() { id = 5, name = "arun", salary = 700 };  Console.WriteLine($"id={ emp.id},name={emp.name},salary={emp.salary}");  Console.ReadLine();  {    }  }  }  } |
| **Output:** |

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| **Q6)** Create employee class , create employees array object and initialize with 5 employees using for, foreach loops and also Lamda expressions. |
| **Code:**  namespace Day7\_project4  {  class Employee  {  public int id;  public string name;  public int salary;    }  class Program  {  static void Main(string[] args)  {  Employee[] emp = new Employee[]  {  new Employee(){id=1,name="sai",salary=100},  new Employee(){id=2,name="rat",salary=200},  new Employee(){id=3,name="rey",salary=300},  new Employee(){id=4,name="cat",salary=400},  new Employee(){id=5,name="oye",salary=500},  };  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}");  }  //Lamda expression  emp.ToList().ForEach(e => Console.WriteLine($"id={e.id},name={e.name},salary={e.salary}"));  Console.ReadLine();  }  }  } |
| **Output:** |

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| **Q8)** Create employee class , create employees array object and initialize with 5 employees and also write the code to print employees who is getting salary >= 400 using for, foreach loops and also Lamda expressions. |
| **Code:**  namespace Day7\_Project5  {    class Employee  {  public int id;  public string name;  public int salary;    }  class Program  {  static void Main(string[] args)  {  Employee[] emp = new Employee[]  {  new Employee(){id=1,name="sai",salary=100},  new Employee(){id=2,name="rat",salary=200},  new Employee(){id=3,name="rey",salary=300},  new Employee(){id=4,name="cat",salary=400},  new Employee(){id=5,name="oye",salary=500},  };  for (int i = 0; i < emp.Length; i++)  {  if(emp[i].salary>=400)  Console.WriteLine($"id={emp[i].id},name={emp[i].name},salary={emp[i].salary}");  }  //foreach loop  foreach (var e in emp)  {  if (e.salary>=400)  Console.WriteLine($"id={e.id},name={e.name},salary={e.salary}");  }  //Lamda expression    emp.ToList().Where(e=>e.salary>=400).ToList().ForEach(e => Console.WriteLine($"id={e.id},name={e.name},salary={e.salary}"));  Console.ReadLine();  }  }    } |
| **Output:** |

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