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| **Day-7 Assignment**  **By**  **Bhanu Rama Krishna Prakash Jakkamsetti**  **1/2/20222** |

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| 1. Create Employee class with three variables and two methods  ReadEmployee and PrintEmployee and create an object and call methods. |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project1  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author: Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: ReadEmployee and PrintEmployee by create an object and call methods.  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  class Employee  {  public int id;  public string name;  public 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}");  }  }  internal class Program  {  static void Main(string[] args)  {  Employee emp = new Employee();  {  emp.ReadEmployee();  emp.PrintEmployee();  Console.ReadLine();  }  }  }  } |
| Output: |
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| 2.write the 3 differences of class and 4 points about object . |
| Class:   1. A class is a group of variables and method. 2. A class is like a design or blueprint to create objects. 3. A class consists of state and behaviour.   Object:   1. An object is an instance of a class. 2. We can create any number of objects. 3. Objects occupy memory. 4. Objects are reference. |

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| 3.Pictorially represent class and multiple objects. |
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| 4. Create below classes:  1. Customer  2. Product  3. Seller  4. Department |
| Code: |
| Main class |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project2  {  internal class Program  {  static void Main(string[] args)  {  Customer customer = new Customer();  Product product = new Product();  Seller seller = new Seller();  Department department = new Department();  customer.ReadEmployee();  customer.PrintEmployee();  product.ReadEmployee();  product.PrintEmployee();  seller.ReadEmployee();  seller.PrintEmployee();  department.ReadEmployee();  department.PrintEmployee();  Console.ReadLine();    }  }  } |
| customer |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project2  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author: Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: create class for customer  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  internal class Customer  {  private int id;  private string name;  private int age;  public void ReadEmployee()  {  Console.WriteLine("Enter id:");  id = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter name:");  name = Console.ReadLine();  Console.WriteLine("Enter age:");  age = Convert.ToInt32(Console.ReadLine());  }  public void PrintEmployee()  {  Console.WriteLine($"id={id} , name={name} , salary={age}");  }  }  } |
| Product |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project2  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author: Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: create product class  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  internal class Product  {  public int id;  public string brand;  public int price;  public void ReadEmployee()  {  Console.WriteLine("Enter id:");  id = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter brand:");  brand = Console.ReadLine();  Console.WriteLine("Enter price:");  price = Convert.ToInt32(Console.ReadLine());  }  public void PrintEmployee()  {  Console.WriteLine($"id={id} , name={brand} , salary={price}");  }  }  } |
| Seller |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project2  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author: Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: create class for seller  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  internal class Seller  {  public int id;  public string name;  public int quantity;  public void ReadEmployee()  {  Console.WriteLine("Enter id:");  id = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter name:");  name = Console.ReadLine();  Console.WriteLine("Enter quantity:");  quantity = Convert.ToInt32(Console.ReadLine());  }  public void PrintEmployee()  {  Console.WriteLine($"id={id} , name={name} , salary={quantity}");  }  }  } |
| Department |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project2  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author: Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: create department class  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  internal class Department  {  public int number;  public string name;  public string type;  public void ReadEmployee()  {  Console.WriteLine("Enter number:");  number = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter name:");  name = Console.ReadLine();  Console.WriteLine("Enter type:");  type = Console.ReadLine();  }  public void PrintEmployee()  {  Console.WriteLine($"id={number} , name={name} , salary={type}");  }  }  } |
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| 5. Create Employee class with 3 public variables.  Create Employee object and initialize with values while creating object and print the values. |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project3  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author: Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: create employee object and initialize values  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  class Employee  {  public int id;  public string name;  public int salary;    }  internal class Program  {  static void Main(string[] args)  {  Employee emp = new Employee() { id=1 ,name="bhanu" ,salary=100000};  Console.WriteLine($"id={emp.id},name={emp.id},salary{emp.salary}");  Employee emp2 = new Employee() { id = 2, name = "krish", salary = 200000 };  Console.WriteLine($"id={emp2.id},name={emp2.id},salary{emp2.salary}");  Console.ReadLine();  }  }  } |
| Output: |
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| 6. Create Employee class as shown below:  class Employee  {  public int id;  public string name;  public int salary;  }  now create employees array object and initialize with 5 employees  write code using  a. for loop  b. foreach loop  c. lambda expression. |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project4  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author: Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: create employee array  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  class Employee  {  public int id;  public string name;  public int salary;  }  internal class Program  {  static void Main(string[] args)  {  Employee[] e = new Employee[]  {  new Employee() { id = 1, name ="bhanu",salary=1000},  new Employee() { id = 2, name = "rama", salary = 2000 },  new Employee() { id = 3, name = "krishna", salary = 3000 },  new Employee() { id = 4, name = "prakash", salary = 4000 },  };  //by using forloop  for (int i = 0; i < e.Length; i++)  {  Console.WriteLine($"id={e[i].id} , name={e[i].name} , salary={e[i].salary}");  }  //by using foreach loop  foreach (var a in e)  {  Console.WriteLine($"id={a.id} , name={a.name} , salary={a.salary}");  }  //by using lambda expression  e.ToList().ForEach(a => Console.WriteLine($"id={a.id} , name={a.name} , salary={a.salary}"));  }    }  } |
| Output: |
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| 7.write code to print employees who is getting salary >=5000 using  for loop  foreach loop  lambda expression |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project6  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author: Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: print values by sorting  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  class Employee  {  public int id;  public string name;  public int salary;  }  internal class Program  {  static void Main(string[] args)  {  Employee[] e = new Employee[]  {  new Employee() { id = 1, name ="bhanu",salary=1000},  new Employee() { id = 2, name = "rama", salary = 6500 },  new Employee() { id = 3, name = "krishna", salary = 3000 },  new Employee() { id = 4, name = "prakash", salary = 5000 },  };  //by using forloop  for (int i = 0; i < e.Length; i++)  {    if (e[i].salary >= 5000)  {    Console.WriteLine($"id={e[i].id} , name={e[i].name} , salary={e[i].salary}");  }  }  //by using foreach loop  foreach (var a in e)  {    if (a.salary >= 5000)  {    Console.WriteLine($"id={a.id} , name={a.name} , salary={a.salary}");  }  }  //by using lambda expression  e.ToList().ForEach(a => Console.WriteLine($"id={a.id} , name={a.name} , salary={a.salary}"));    e.ToList().Where(a => a.salary >= 5000).ToList().ForEach(a => Console.WriteLine($"id={a.id} , name={a.name} , salary={a.salary}"));  }  } |
| Output: |
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| 8. create list of Customer an Product Arrays and practice for, foreach and lambda expression |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day7\_project7  {  /\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \* Author: Bhanu Rama Krishna Prakash Jakkamsetti  \* Purpose: create customer and product array  \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  class Customer  {  public int id;  public string name;  public int age;  }  class Product  {  public int price;  public string brand;  public int quantity;  }  internal class Program  {  static void Main(string[] args)  {  Customer[] e = new Customer[]  {  new Customer() { id = 1, name ="bhanu",age=10},  new Customer() { id = 2, name = "rama", age = 15 },  new Customer() { id = 3, name = "krishna", age = 20 },  new Customer() { id = 4, name = "prakash", age = 25 },  };  //by using forloop  for (int i = 0; i < e.Length; i++)  {  Console.WriteLine($"id={e[i].id} , name={e[i].name} , salary={e[i].age}");  }  //by using foreach loop  foreach (var a in e)  {  Console.WriteLine($"id={a.id} , name={a.name} , salary={a.age}");  }  //by using lambda expression  e.ToList().ForEach(a => Console.WriteLine($"id={a.id} , name={a.name} , salary={a.age}"));  Product[] p = new Product[]  {  new Product() { price = 1000, brand ="puma",quantity=10},  new Product() { price = 2000, brand = "nike", quantity = 15 },  new Product() { price = 3000, brand = "roadster", quantity = 20 },  new Product() { price = 4000, brand = "jill", quantity = 25 },  };  //by using forloop  for (int i = 0; i < p.Length; i++)  {  Console.WriteLine($"id={p[i].price} , name={p[i].brand} , salary={p[i].quantity}");  }  //by using foreach loop  foreach (var a in p)  {  Console.WriteLine($"id={a.price} , name={a.brand} , salary={a.quantity}");  }  //by using lambda expression  p.ToList().ForEach(a => Console.WriteLine($"id={a.price} , name={a.brand} , salary={a.quantity}"));  }  }  } |
| Output: |
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