Description:

Create an object for CompanyDetails class and call above methods also follow the all coding standards.

QUESTION 4:

Project :MyPhone
Package :org.phone
Class :PhoneInfo

Methods :phoneName(),phoneMieiNum(),Camera(),storage(),osName()

Description:

Create an object for PhoneInfo class and call above methods also follow the all coding standards.

QUESTION 5:

Project :LanguageDetails

Package :org.lang

Class :LanguageInfo

Methods :tamilLanguage(),englishLanguage(),hindiLanguage()

Class :StateDetails

Methods :southIndia(),northIndia()

Description:

Create an object for LanguageInfo and StateDetails inside the StateDetails class and call both classes methods also follow the all coding standards.

QUESTION 6:

Project :EmployeeInformation

Package :org.emp Class :Employee Methods :empName()

Package :org.company
Class :Company
Methods :companyName()

Package :org.client Class :Client Methods :clientName()

Package :org.project

Class :Project
Methods :projectName()

Description:

Create an object for all 4 classes inside the Employee class and call all classes methods also follow the all coding standards.

QUESTION 7:

Project :PhoneDetails
Package :org.phone
Class :ExternalStorage

Methods :size()

Class :InternalStorage

Methods :processorName(),ramSize()

Description:

Create an object for ExternalStorage and InternalStorage inside the InternalStorage class and call both classes methods also follow the all coding standards.

QUESTION 8:

Project :CollegeInformation

Package :org.college Class :College

Methods :collegeName(),collegeCode(),collegeRank()

Class :Student

Methods :studentName(),studentDept(),studentId()

Class :Hostel
Methods :hostelName()

Class :Dept Methods :deptName()

Description:

Create an object for all 4 classes inside the College class and call all classes methods also follow the all coding standards.

QUESTION 9:

:VehicleInformation Project :org.allvehicle Package

Class :Vehicle

:VehicleNecessery() Methods

:org.twowheeler Package :TwoWheller Class Methods :bike(),cycle()

:org.threewheeler Package :ThreeWheeler Class

Methods :Auto()

:org.fourwheeler Package :FourWheeler Class

Methods :car(),bus(),lorry()

Description:

Create an object for all 4 classes inside the Vehicle class and call all classes methods also follow the all coding standards.

OUESTION 10:

Project :TransportInformation

Package :org.transport Class :Transport Methods :TransportForm

Package :org.road Class :Road

Methods :bike(),cycle(),bus(),car()

Package :org.air Class :Air

Methods :aeroPlane(),heliCopter()

Package :org.water Class :Water

Methods :boat(),ship()

Description:

Create an object for all 4 classes inside the Transport class and call all classes methods also follow the all coding standards.

QUESTION 11:

:NetworkInformation Project

:org.network Package

:Wifi Class

Methods :wifiName()

Class :MobileData Methods :dataName()

Class :Lan Methods :lanName()

Class :Wireless
Methods :modamName()

Description:

Create an object for all 4 classes inside the Wifi class and call all classes methods also follow the all coding standards.

```
Day2_Inheritance,Scanner,Datatype,access specifier
DAY2:
1. Inheritance
2.Access specifiers
3.Data types
4.Scanner class
QUESTIONS (Theory)
1.What is mean by inheritance?
2. Types of inheritance and explain all types?
3.What is mean by multiple inheritance, why java won't support multiple inheritance?
4.Difference between hybrid and hierachical inheritance?
5.What is the use of access specifier and types?
6.Difference between public and protected?
7.What is mean by Wrapper class?
8.What is default value of String?
9. What is difference between primitive and non primitive datatypes?
10.What is default package in java?
11.What is the super class of all java class?
12.What is use of scanner class?
13. What are the different methods available in Scanner class?
14. Scanner class is under which package?
15.Difference between next() and nextLine()?
QUESTIONS(Programs)
OUESTION 1:
Description: Using Scanner class get the below details
             empId
             empName
             empEmail
             empPhoneno
             empSalary
             empGender
             empCity
QUESTION 2:
Description: Using Scanner class get the below details
             studentId
             studentName
             Mark1
             Mark2
             Mark3
             Mark4
             Mark5
           :Find the total and average of marks
QUESTION 3:
_____
     package name: org.all
     Project name: LanguageDetails
     Class name : Languageclass
                 : alllanguage
     Methods
     package name: org.tamil
     Project name: LanguageDetails
     Class name : Tamil
     Methods
                 : tamillanguage
     package name: org.english
```

Project name: LanguageDetails

Class name : English

Methods : englishlanguage

package name: org.telgu
Project name: LanguageDetails

Class name : Telgu

Methods : telgulanguage

Description:

create above 4 packages and call all your class methods into the Languageclass using multilevel inheritance.

QUESTION 4:

package name: org.india
Project name: SouthIndia
Class name : India
Methods : india

package name: org.tamilnadu
Project name: SouthIndia
Class name : TamiladuN
Methods : tamillanguage

package name: org.kerala
Project name: SouthIndia
Class name : kerala
Methods : malayalam

package name: org.andrapradesh
Project name: SouthIndia
Class name : AndhraPradesh

Methods : telugu

Description:

create above 4 packages and call all your class methods into the India using multilevel inheritance.

QUESTION 5:

Project :CollegeInformation

Package :org.college Class :College

Methods :collegeName(),collegeCode(),collegeRank()

Class :Student

Methods :studentName(),studentDept(),studentId()

Class :Hostel

Methods :HostelName()

Class :dept

Methods :deptName()

Description:

create above 4 class and call all your class methods into the Student using multilevel inheritance.

QUESTION 6:

Project :COmputer Class :Computer

Methods :computerModel()

Class :Desktop Methods :desktopSize()

Description:

create above 2 class and call all your class methods into the Desktop using single inheritance.

QUESTION 7:

Project :LanguageDetails

Package :org.lang Class :LanguageInfo

Methods :tamilLanguage(),englishLanguage(),hindiLanguage()

Class :StateDetails

Methods :southIndia(),northIndia()

Description:

create above 2 class and call all your class methods into the LanguageInfo using single inheritance.

QUESTION 8:

Description: Using Scanner class get the below details

StudentId StudentName StudentEmail StudentPhoneno StudentDept StudentGender StudentCity

QUESTION 9:

Project :BankDetails
Package :org.bank
Class :BankInfo

Methods :saving(),fixed()

Class :AxisBank Methods :deposit()

Description:

create above 2 class and call all your class methods into the BankInfo using single inheritance.

QUESTION 10:

Project :CompanyDetails
Package :org.company
Class :Company
Methods :companyName()

Package :org.client Class :Client

Methods :clientName()

Description:

create above 2 packages and call all your class methods into the Comapany using single inheritance.

QUESTION 11:

Project :EducationInformation

Package :org.edu Class :Education Methods :ug(),pg()

Class :Arts

Methods :bsc(),bEd(),bA(),bBA()

Class :Engineering
Methods :bE(),bTech()

Class :Medicine

Methods :physiyo(),dental(),mbbs()

Description:

create above 4 class and call all your class methods into the Education using multilevel

inheritance.

```
Day3_Polymorphism, Abstraction
DAY3:
1.Polymorphism
2.Abstraction
QUESTIONS (Theory)
1.What is mean by polymorphism?
2.Difference between method overloading and method overriding?
3.What is mean by Abstraction?
4.Difference between Abstract class and interface?
5.What is mean by abstract method?
6.Can we create object for abstract class?
7.In interface, can we make method as static?
8.In interface, can we make method as final?
9. How will achieve multiple inheritance in java, write a code for that?
QUESTIONS(Programs)
QUESTION 1:
Find the answer for below questions and tell whether it is possible or not?
I implements I
I implements C
I implements A
I extends I
I extends C
I extends A
C implements I
C implements C
C implements A
C extends I
C extends C
C extends A
A implements I
A implements C
A implements A
A extends I
A extends C
A extends A
A-abstract class
C-class
I- interface
QUESTION 2:
     Project
               :EmployeeDetails
     Package
               :org.emp
     Class
               :Employee
     Methods
               :empId()
```

Description

You have to overload the method empId() based on different datatype in arguments.

QUESTION 3: _____

> Project :CompanyDetails :org.company Package Class :CompanyInfo :companyName() Methods

Description

You have to overload the method companyName() based on different Number of arguments.

QUESTION 4:

Project :MyPhone
Package :org.phone
Class :Phone
Methods :phoneInfo()

Description

You have to overload the method phoneInfo() based on different datatype order in arguments.

QUESTION 5:

Project :GreensAddress
Package :org.add
Class :GreensTech
Methods :greensOmr()

Description

You have to overload the method greensOmr() based on order, type, number.

QUESTION 6:

Project :BankDetails
Package :org.bank
Class :BankInfo

Methods :saving(),fixed(),deposit()

Class :AxisBank Methods :deposit()

Description:

You have to override the method deposit in AxisBank.

QUESTION 7:

Project :EducationInformation

Package :org.edu Class :Education Methods :ug(),pg()

Class :Arts

Methods :bSc(),bEd(),bA(),bBA(),ug(),pg()

Description:

You have to override the method ug(),pg() in Arts.

QUESTION 8:

Project :UniversityInformation

Package :org.univ Class :University Methods :ug(),pg()

Class :College
Methods :ug(),pg()

Description:

ug(),pg() is just a templete in University class and You have to override the method ug(),pg() in College class.

QUESTION 9:

Project :BikeInformation

Package :org.bike

Interface :Bike

Methods :cost(),speed()

Class :Ktm

Methods :cost(),speed()

Description:

cost(),speed() is just a templete in Bike Interface and You have to override the method
cost(),speed() in Ktm class.

QUESTION 10:

Project :Computer Interface :HardWare

Methods :hardwareResources()

Interface :Software

Methods :softwareResources()

Class :Desktop

Methods :desktopModel()

Description:

create 2 Interface and archieve multiple inheritance.

```
Day4 ControlStatements
DAY4:
1.if/else if
2.Loopings(for, while, do-while)
3.Switch case
4.break/continue
QUESTIONS (Theory)
1. What is difference between break and continue?
2. Whether we can use continue statement in switch?
3.What is mean by control statments and types?
4.What is mean by for loop?
5.Can you explain about for loop execution process?
6.What is difference between while and do-while?
7. What is the use of default keyword in switch?
8.Difference between for and while loop?
QUESTIONS(Find the output)
QUESTION 1:
package org.test;
public class Hello {
  public static void main(String[] args) {
    for (int i = 1; i <= 100; i++) {
      if (i == 5) {
      System.out.println(i);
    }
  }
}
QUESTION 2:
-----
package org.test;
public class Hello {
  public static void main(String[] args) {
    for (int i = 1; i <= 10; i++) {
      if (i == 5) {
       break;
      System.out.println(i);
    }
  }
}
QUESTION 3:
-----
package org.test;
public class Hello {
  public static void main(String[] args) {
    for (int i = 1; i <= 10; i++) {
      if (i == 5) {
```

```
continue;
      }
      System.out.println(i);
    }
  }
}
QUESTION 4:
package org.test;
public class Hello {
  public static void main(String[] args) {
    for (int i = 1; i <= 3; i++) {
      for (int j = 1; j <= 3; j++) {
       System.out.println(j);
      }
    }
  }
}
QUESTION 5:
package org.test;
public class Hello {
  public static void main(String[] args) {
    for (int i = 1; i <= 3; i++) {
      for (int j = 1; j <= 3; j++) {
        System.out.println(i);
      }
    }
  }
}
QUESTION 6:
package org.test;
public class Hello {
  public static void main(String[] args) {
    for (int i = 1; i <= 3; i++) {
      for (int j = 1; j <= i; j++) {
       System.out.println(j);
      }
    }
  }
}
QUESTION 7:
-----
package org.test;
public class Hello {
  public static void main(String[] args) {
```

```
for (int i = 1; i <= 3; i++) {
      for (int j = i + 1; j <= 3; j++) {
       System.out.println(j);
    }
 }
}
QUESTION 8:
package org.test;
public class Hello {
 public static void main(String[] args) {
   for (int i = 1; i <= 3; i++) {
      for (int j = i + 1; j <= i; j++) {
       System.out.println(j);
      }
    }
 }
}
QUESTION 9:
package org.test;
public class Hello {
 public static void main(String[] args) {
    int i=5;
      if (i == 5) {
       break;
      System.out.println(i);
 }
}
QUESTION 10:
package org.test;
public class Hello {
 public static void main(String[] args) {
    int i=5;
      if (i == 5) {
       continue;
     System.out.println(i);
 }
}
QUESTIONS (Programs)
-----
QUESTION 1:
Description: Write Java program to allow the user to input his/her age.
             Then the program will show if the person is eligible to vote.
             A person who is eligible to vote must be older than or equal 1 to 18 years old.
```

```
Example:
Input = 10
Output = print not eligible.
QUESTION 2:
Description: Write a program to find even or odd number
Example:
Input = 10
Output = Even
QUESTION 3:
Description: Write a program to print even number from 1 to 100
Example:
Output = 2,4,....100
QUESTION 4:
Description: Find the sum of odd number 1 to 100
Example:
Output = 2500
OUESTION 5:
Description: Count of even number 1 to 100
Example:
Output = 50
QUESTION 6:
Description: Write a program to find the factorial of a number.
Example:
Input = 5
Output = 120
QUESTION 7:
Description: Write a program to print the fibonacci series of a number 1 to 100.
Example:
Output = 0,1,1,2,3,5...
QUESTION 8:
Description: Find prime number or not.
Example:
Input = 11
Output = prime number
QUESTION 9:
Description: Print the below patterns using for loop.
```

```
Output:
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5 6 7
      * * * *
*
* *
* * *
* * * *
* * * * *
QUESTION 10:
Description: Find Amstrong number or not
Example:
Input = 153
Output = Amstrong number
QUESTION 11:
Description: Reverse the number
Example:
Input = 123
Output = 321
QUESTION 12:
Description: Count of the number
Example:
Input = 123
Output = 3
QUESTION 13:
Description: Sum of the number
Example:
Input = 123
Output = 6
QUESTION 14:
Description: Verify the number is palindrome number not
Example:
-----
```

Input = 141

Output = Palindrome

```
1.Constructor and types
2.this and super
3.types of var
4.static/final
QUESTIONS (Theory)
1.What is mean by constructor and types?
2.Explain the types of variable
3.Do constructors have any return type?
4. Syntax for creating constructor?
5. What are the rules for defining a constructor?
7. Why a return type is not allowed for constructor?
8.Can we declare constructor as 'private'?
9. Why a compiler given constructor is called as default constructor?
10.What is constructor chaining and how can it be achieved in Java?
11.Can we use this() and super() in a method?
12. What are the common uses of "this" keyword in java?
13. Types of variable?
14. What is meant by local variable, instance variable, class/static variable?
15.What is mean by static keyword in java?
16. Can we override static method in java?
17. Can we overload static method in java?
18.What is mean by static variable?
19.What is mean by static method?
20.What is mean by final keyword and what's happend when we declare final as in
class, method, variable?
21. What is difference between final and finalize keyword?
22. Where local, static and class variables stores in jvm?
QUESTIONS(Find the below Output)
OUESTION 1:
_____
package org.test;
public class A {
  public A() {
    this("JAVA");
    System.out.println("Default const...");
  public A(int id) {
    this(3456.5678f);
    System.out.println(id);
  public A(String name) {
    this(12);
    System.out.println(name);
  public A(float sal) {
    System.out.println(sal);
  public static void main(String[] args) {
    A = new A();
QUESTION 2:
-----
```

DAY5:

```
package org.test;
public class A extends B{
  public A() {
    System.out.println("Default const...");
  public static void main(String[] args) {
   A a = new A();
}
package org.test;
public class B {
  public B() {
   System.out.println("Super class");
}
QUESTION 3:
package org.test;
public class A extends B{
  public A() {
    System.out.println("Default const...");
  }
  public static void main(String[] args) {
   A = new A();
}
package org.test;
public class B {
  public B() {
    System.out.println("Super class");
  public B(int id) {
    System.out.println(id);
}
QUESTION 4:
package org.test;
public class A extends B {
  public A() {
    super(12);
    System.out.println("Default const...");
  public static void main(String[] args) {
    A = new A();
```

```
}
package org.test;
public class B {
  public B() {
    System.out.println("Super class");
  public B(int id) {
    System.out.println(id);
}
QUESTION 5:
package org.test;
public class B {
  public B(int id) {
    System.out.println(id);
}
package org.test;
public class A extends B {
  public A() {
    super(12);
    System.out.println("Default const...");
  public static void main(String[] args) {
   A = new A();
}
QUESTION 6:
package org.test;
public class A extends B {
  public A() {
    System.out.println("Default const...");
  }
  public static void main(String[] args) {
    A a = new A();
}
package org.test;
public class B {
  public B(int id) {
    System.out.println(id);
}
```

```
1.String functions
2.Literal String
3.Non Literal String
4. Mutable String
5.ImMutable String
QUESTIONS (Theory)
1.What is mean by string?
2. How to find length of the string?
3. How to find partcular character in string?
4. How to split the string?
5.What is difference between literal String and non literal string?
6.What is mutable and immutable string?
7.Difference between stringbulider and stringbuffer?
8. Method name to identify memory location?
9. What are the string functions available in java?
10.What is difference between charAt() and contains() method?
11.What is the return type of compareTo()
12. Where the Literal String and non literal String stores?
13.What is mean by ASCII value?
QUESTIONS(Programs)
OUESTION 1:
Description: Find the length of the below string
  String 1: GreensTechnology
  String 2: SeleniumAutomationtool
  String 3: velmurugan
  String 4: javaprogram
  String 5: 9095484678
QUESTION 2:
Description: Find the particular character index in the given string
  String 1: GreensTechnology
             Find the last index of o
   String 2: SeleniumAutomationtool
             Find the index of o
   String 3: Velmurugan
             Find the index of n
   String 4: javaprogram
             Find the last index of (emptyspace)
   String 5: 9095484678
            Find the index of 8
Question 3:
Description: Find the particular character in the given string
  String 1: GreensTechnology
             print the character h
   String 2: SeleniumAutomationtool
             print the character o
   String 3: velmurugan
             print the character u
```

DAY6:

```
String 4: javaprogram
            print the character p
   String 5: 9095484678
            print the character 7
QUESTION 4:
Description : Get two input from user and check the equality
           : print in the output whether it is Equal or not
Example:
Input:
String 1 : Java
String 2 : Java
Example:
Input:
String 1 : Java
String 2 : java
Example:
Input:
String 1 : Green Technology
String 2 : GreenTechnology.
Example(use equalsIgnoreCase):
Input:
String 1 : Java
String 2 : java
Example(use equalsIgnoreCase) :
Input:
String 1 : Nisha
String 2 : nisha
QUESTION 5:
-----
QUESTION 5.1:
Description: Get the email id from the user and verify '@' is present or not?
Example:
Input = velmurugank451@gmail.com
Output = valid email id
QUESTION 5.2:
Description:Get the address from the user and verify "pincode" is present or not?
Example:
Input = 5-35-2a,venkatesh nivas,Aruppukottai
Output = invalid address
QUESTION 5.3:
Description:Get the email from the user and verify '@' is present or not and return true or false?
Example:
-----
```

```
Input = Nishakerala24@gmail.com
Output = True/False
QUESTION 5.4:
Description:Get the phonenumber from the user and verify any character is present or not .
            If character is present return invalid number
Example:
Input = 90954a6o78
Output = False
QUESTION 6:
Description:Get the phonenumber from the user
            If phonenumber exceeds greater than 10 then return invalid number
Example:
Input = 89034256972365
output = invalid
Example 2:
Input = 9095484678
Output = valid
QUESTION 7:
-----
OUESTION 7.1:
Description: Given string as "Welcome to java class" and replace java into sql.
Example:
Input = Welcome to class java
output = Welcome to class sql
QUESTION 7.2:
Description: Given string as "Greens Adayar" and replace Adayar into Omr.
Example:
Input = Greens Adayar
Output = Greens Omr
QUESTION 7.3:
Description: Given String as "Welcome to java class" and Replace space into '#'
Example:
input:Welcome to java class
output:Welcome#to#java#class
QUESTION 7.4:
Description:Get the email from the user and verify "gmail" is present or not.
            If present replace that gmail into yahoo
Example:
```

Input = Nishakerala24@gmail.com
Output = Nishakerala24@yahoo.com

QUESTION 7.5: Description: Get the address from the user and verify "pincode" is present or not. If present replce the pincode with empty space Example: Input = 5-35-2a, venkatesh nivas, Aruppukottai, pincode-626101 Output = 5-35-2a, venkatesh nivas, Aruppukottai QUESTION 8 QUESTION 8.1 Description:Get the input from the user and print that word in lowercase Example: Input = NISHANTHI Output = nishanthi QUESTION 8.2 Description:Get the input from the user and print that word in Uppercase Example: Input = nishanthi Output = NISHANTHI OUESTION 8.3 Description:Convert all small letter and into capital letter Example: Input = WelcomE Output = wELCOMe QUESTION 8.4 Description: Find the number of uppercase count and lowercase count in the given String Example: Input = WelComeToJava Output: UpperCase=4 LowerCase=9 QUESTION 9 -----QUESTION 9.1 Description: Given String as "Welcome to java class" and verify whether the given string startsWith welcome Example: Input = Welcome to class java

QUESTION 9.2

output = True

Description: Given String as "Hai i am nisha" and verify whether the given string startsWith welcome

```
Example:
Input = Hai i am nisha
output = False
QUESTION 9.3
Description: Given String as "Welcome to java class" and verify whether the given string endsWith
class
Example:
Input = Welcome to java class
output = True
QUESTION 9.4
Description: Given String as "Welcome to java class" and verify whether the given string endsWith
java
Example:
Input = Welcome to java class
output = False
QUESTION 9.5
Description: Given String as "Welcome to java class" and verify whether the string is empty or not
Example:
Input = Welcome to java class
output = False
QUESTION 9.6
Description: Given String as "" and verify whether the string is empty or not
Example:
-----
Input = ""
Output = False
QUESTION 10
Description : Get two input from user and Compare
Example
String 1 : Nisha
String 2 : nisha
Example
String 1 : Nia
String 2 : nisha
QUESTION 11
-----
QUESTION 11.1
Description: Generate the two literal string and find the identityHashCose()
Example
-----
```

```
String 1: Nisha
String 2: Nisha
QUESTION 11.2
Description: Generate the two non literal string and find the identityHashCose()
Example
String 1: Nisha
String 2 : Nisha
QUESTION 11.3
Description: Generate the three non literal string and find the identityHashCose()
Example
-----
String 1 : Nisha
String 2 : Rengan
String 3 : NishaRengan
QUESTION 11.4
-----
Description : Generate the three literal string and find the identityHashCose()
Example
-----
String 1 : Nisha
String 2: Rengan
String 3 : NishaRengan
QUESTION 12
QUESTION 12.1
Description: Given String as "Welcome to java class" and split it by space.
Example:
-----
Input :Welcome to java class
Output:
Welcome
to
java
class
QUESTION 12.2
Description: Given String as "Welcome to java class" and split it by 1
Example:
------
Input :Welcome to java class
Output:
_____
We
come to java c
ass
QUESTION 13
-----
QUESTION 13.1
```

Description: Given String as "Welcome to java class" and generate a substring.

```
Example:
Input :Welcome to java class
Output:
Welcome
QUESTION 14
-----
Example:
Description: Given String as "Welcome" and the number of consonant count and vowels count
Example:
Input = Welcome
output:
-----
vowels
        = 3
consonant = 4
QUESTION 15:
Description: Find the count of caps, small, number and special character in given string
Example:
Input: Welcome To Java class @123
Output
caps count :3
small count :15
number count:3
Special char:5
QUESTION 16
Description: Replace all vowels char into '@'
Example:
Input = Welcome
Output = W@lc@m@
```

```
-----
1.Arrays
2.Collections Introduction
3.List(ArrayList only)
QUESTIONS (Theory)
1. What do you mean by an array and How to create an Array?
2.Can you change size of array once created?
3.Is it legal to initialize an array int i[] = \{1, 2, 3, 4, 5\}
4. Advantages and disadvantages of Array?
5. Can we change the size of an array at run time?
6.Can you declare an array without assigning the size of an array?
7. What is the default value of Array?
8. How to print element of Array?
9. How to compare Two Arrays?
10. How to sort an Array?
11. Can we declare array size as a negative number?
12. Can we add or delete an element after assigning an array?
13. Can we use Generics with the array?
14.What is collection and explain about types?
15. What is the difference between ArrayList and Vector?
16.What is the difference between ArrayList and LinkedList?
17. How to convert Array to List and List to Array
QUESTIONS(Find the below Output)
OUESTION 1:
Description: Write a Java program to sum values of an array
        Input a[]= {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}
       Output = 55
QUESTION 2:
Description: Write a Java program to calculate the average value of array elements.
        Input a[]= {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}
        Output = average = 7.0
QUESTION 3:
Description: Write a Java program to remove duplicates from array
        Input a[]= {10,10,20,50,60,80,60,50}
        Output a[]= {10,20,50,60,80}
QUESTION 4:
_____
QUESTION 4.1:
Description : Create a new ArrayListlist with values and find the length of it
              Input : List = 10,20,30,90,10,10,40,50
QUESTION 4.2:
Description : Create a new LinkedListlist with values and find the length of it
              Input : List = 100,200,300,400,500,600,700
QUESTION 4.3:
Description : Create a new vector with values and find the length of it
              Input : List = 105,205,305,405,505,605,705,805
QUESTION 4.4:
-----
```

DAY7:

Description: Create a new LinkedListlist with values and find the size() of it.

Input : List = 100,200,300,400,500,600,700

QUESTION 5:

QUESTION 5.1:

Description: Get the first index value of 10

Input: List = 10,20,30,90

QUESTION 5.2:

Description : Get the last index value of 10

Input: List = 10,20,30,90,10,10,40,50

QUESTION 5.3:

Description: Get the index value of 50

Input: List = 10,20,30,90,10,10,40,50

QUESTION 5.4:

Description : Get the index value of 90

Input: List = 10,20,30,90,10,10,40,50

QUESTION 5.5:

Description : Get the each index value of 10 present in below list

Input: List = 10,20,30,90,10,10,40,50,10

QUESTION 5.6:

Description: Get the each index value of 70 present in below list

Input: List = 10,20,30,90,10,10,40,50,10

QUESTION 6: _____

QUESTION 6.1:

Description : Get the value present at 2nd index

Input: List = 10,20,30,40,50,60

QUESTION 6.2:

Description : Get the value present at 4th index

Input: List = 100,200,300,400,500,600,700

QUESTION 6.3:

Description : Get the value present at 8th index

Input: List = 105,205,305,405,505,605,705,805

QUESTION 6.4:

Description : Get the each value of list by using normal for loop

Input: List = 105,205,305,405,505,605,705,805

QUESTION 6.5:

Description: Get the each value of list by using enhanced for loop

Input: List = 105,205,305,405,505,605,705,805

QUESTION 7: -----

QUESTION 7.1:

Description : Remove the value present at 2nd index

Input: List = 10,20,30,40,50,60

QUESTION 7.2:

Description : Remove the value present at 10th index

Input: List = 10,20,30,90,10,10,40

QUESTION 7.3:

Description : Remove the last value of 10 present in the list

Input: List = 10,20,30,90,10,10,40

QUESTION 8: -----QUESTION 8.1:

Description: Add a value 50 in the 2nd index and display the list after adding.

Input : List = 10,20,30,90,10,10,40,50

QUESTION 8.2:

Description : Add a value 70 at the end of the list

Input : List = 10,20,30,90,10,10,40,50

QUESTION 8.3:

Description : Add a value 80 at the 8th index of list

Input : List = 10,20,30,90,10,10,40,50

QUESTION 8.4:

Description : Add a value 100 at the last index of 10 in the list

Input : List = 10,20,30,90,10,10,40,50

QUESTION 9:

QUESTION 9.1:

Description : Replace the value 300 into 350 in the list

Input : List = 100,200,300,400,500,600,700

QUESTION 9.2:

D-----

Description: Replace the value present in 7th index as 90

Input: List = 10,20,30,90,10,10,40,50,10

QUESTION 9.3:

Description : Replace the 10 into 100 in List

Input: List = 10,20,30,90,10,10,40,50,30 Output: List = 100,20,30,90,100,100,40,50,30

QUESTION 10:

QUESTION 10.1:

Q023.10.1 10.11.

Description : Create a new ArrayListlists with values and return the common values

Input : List = 10,20,30,90,10,10,40,50

Input : List = 30,40,50,60,80

QUESTION 10.2:

Description : Create a new ArrayListlists with values and return the common values

Input : List = 10,20,30,90,10,10,40,50 Input : List = 10,20,60,50,40,70,80,90

QUESTION 10.3:

Description : Create a new ArrayListlists with values and return the common values

Input : List = 10,20,30,40,50,60,70,80

Input : List = 100,200,300,400,500,600,700,8000

QUESTION 11:

QUESTION 11.1:

Description : Create a new ArrayListlists with values and perform removeAll() function

Input : List = 10,20,30,90,10,10,40,50

Input : List = 30,40,50,60,80

QUESTION 11.2:

Description : Create a new ArrayListlists with values and perform removeAll() function

Input : List = 10,20,30,90,10,10,40,50
Input : List = 10,20,60,50,40,70,80,90

QUESTION 11.3:

Description : Create a new ArrayListlists with values and perform removeAll() function

Input : List = 10,20,30,40,50,60,70,80

Input : List = 100,200,300,400,500,600,700,8000

```
DAY8:
1.Userdefine List
2.LinkedList vs Vector
3.Set and types
Day8:
1.Userdefine List
2.LinkedList vs Vector
3.Set and types
QUESTIONS (Theory)
1.Describe the Collections type hierarchy. What are the main interfaces, and what are the
differences between them?
2.Explain about user defined list?
3.Mention what is Linked List?
4.what is difference between set and List?
5.What is the difference between HashSet and TreeSet ?
6.Difference between Enumurator, Iterator and List Iterator
7. How to convert List into Set
QUESTIONS:
QUESTION 1.1:
Description : Create a HashSet for the below values
              Input : List = 10,20,30,40,50,60,70,80,90,10,20
QUESTION 1.2:
Description : Create a LinkedHashSet for the below values
              Input : List = 10,20,30,40,50,60,70,80,90,10,20
QUESTION 1.3:
Description : Create a TreeSet for the below values
              Input : List = 10,20,30,40,50,60,70,80,90,10,20
QUESTION 2:
_ _ _ _ _ _ _ _ _ _ _ _
QUESTION 2.1:
Description : Convert the below list in to set(use addAll()) method
              Input : List = 10,20,30,90,10,10,40,50
QUESTION 2.2:
Description : Convert the below list in to set(use addAll()) method
              Input : List = 105,205,305,405,505,605,705,805,505,605
QUESTION 2.3:
Description : Convert the below list in to set(use addAll()) method
              Input : List = 100,200,300,400,500,600,700,100,300,500
QUESTION 3:
-----
QUESTION 3.1:
Description : Get the each value of set by using enhanced for loop
                      List = 105,205,305,405,505,605,705,805
              Input:
QUESTION 3.2:
```

Description : Create a TreeSet and iterate each value in the set by using enhanced for loop

Input : List = 10,20,30,40,50,60,70,80,90,10,20

QUESTION 3.3:

Description : Create a HashSet and iterate each value in the set by using enhanced for loop

Input : List = 10,20,30,40,50,60,70,80,90,10,20

QUESTION 4:

QUESTION 4.1:

QUESTION 4.1.

Description: Create a new HashSet with values and return the common values

Input : List = 10,20,30,90,10,10,40,50

Input : List = 30,40,50,60,80

QUESTION 4.2:

Description : Create a new LinkedHashSet with values and return the common values

Input : List = 10,20,30,90,10,10,40,50 Input : List = 10,20,60,50,40,70,80,90

QUESTION 4.3:

Description : Create a new TreeSet with values and return the common values

Input : List = 10,20,30,40,50,60,70,80

Input : List = 100,200,300,400,500,600,700,8000

QUESTION 5:

OUESTION 5.1:

QUESTION 3.1.

Description : Create a new HashSet with values and perform removeAll() function

Input : List = 10,20,30,90,10,10,40,50

Input : List = 30,40,50,60,80

QUESTION 5.2:

_ . . .

Description : Create a new LinkedHashSet with values and perform removeAll() function

Input : List = 10,20,30,90,10,10,40,50
Input : List = 10,20,60,50,40,70,80,90

QUESTION 5.3:

Description : Create a new TreeSet with values and perform removeAll() function

Input : List = 10,20,30,40,50,60,70,80

Input : List = 100,200,300,400,500,600,700,8000

QUESTION 6:

Description: Create a userdefine Set and insert the 10 employee details

Input : empId,name,phone,address,dob,doj,eMail,gender,Sal
Output: Using scanner class insert 10 employee details

QUESTION 7:

Description: Create a userdefine Set and insert the 10 Student details

Key : stdId,stdName,stdPhone,address,dOB,eMail,gender

Give the related values for key for each Student

```
DAY9:
_ _ _ _ _
1.Map and types
2.User define Map
QUESTIONS (Theory)
1.What is map?
2.What is difference between Hash Map and Hash Table?
3.What is difference between set and Map?
4. What are the classes implementing List interface?
5. Which all classes implement Set interface ?
6.Explain about user defined Map?
7. How null allows in below maps:
 HashMap
              :k?,v?
 LinkedHashMap:k?,v?
 TreeMap
             :k?,v?
 HashTable
              :k?,v?
8. How to Iterate Map ?
9. Return type entrySet?
QUESTIONS(practical)
QUESTION 1.1:
Description: Create a HashMap with the below key and values
              key: 10,20,30,40,50,60,10,50,40
              values : java,sql,oops,Sql,oracle,DB,selenium,psql,Hadoop.
QUESTION 1.2:
Description : Create a LinkedHashMap with the below key and values
                  : 10,20,30,40,50,60,10,50,40
              Values: 10,20,30,40,50,60,10,50,40
QUESTION 1.3:
Description : Create a TreeHashMap with the below key and values
                   : !,@,#,$,%,^,&,*,(,
              key
              Values: 10,20,30,40,50,60,10,50,40
QUESTION 1.4:
Description : Create a HashTable with the below key and values
                  : vel, Ganesh, Dinesh, Vengat, subash
              Key
              Values : Selenium, framework, oracle, corejava, jira
QUESTION 2:
-----
QUESTION 2.1:
Description : Create a HashMap with the below key and values and get(print) the key only in the map.
              key : 10,20,30,40,50,60,10,50,40
              values : java,sql,oops,Sql,oracle,DB,selenium,psql,Hadoop.
QUESTION 2.2:
Description : Create a LinkedHashMap with the below key and values and get(print) the key only in
the map.
                     : 10,20,30,40,50,60,10,50,40
              Values: 10,20,30,40,50,60,10,50,40
```

QUESTION 2.3:

Description: Create a TreeMap with the below key and values and get(print) the key only in the map.

key : $!,@,#,\$,%,^,\&,*,(,$

Values: 10,20,30,40,50,60,10,50,409

QUESTION 2.4:

Description : Create a HashTable with the below key and values and get(print) the key only in the

map.

Key : vel,Ganesh,Dinesh,Vengat,subash

Values : Selenium, framework, oracle, corejava, jira

QUESTION 3:

. -----

QUESTION 3.1:

Description : Create a HashMap with the below key and values and get(print) the values only in the

nap.

key : 10,20,30,40,50,60,10,50,40

values : java,sql,oops,Sql,oracle,DB,selenium,psql,Hadoop.

QUESTION 3.2:

Description : Create a LinkedHashMap with the below key and values and get(print) the values only in

the map.

key : 10,20,30,40,50,60,10,50,40 Values : 10,20,30,40,50,60,10,50,40

QUESTION 3.3:

Description : Create a TreeHashMap with the below key and values and get(print) the values only in

the map.

key : !,@,#,\$,%,^,&,*,(,

Values: 10,20,30,40,50,60,10,50,409

QUESTION 3.4:

_ . . .

Description : Create a HashTable with the below key and values and get(print) the key only in the

map.

Key : vel,Ganesh,Dinesh,Vengat,subash

Values : Selenium, framework, oracle, corejava, jira

QUESTION 4:

QUESTION 4.1:

Description: Create a HashMap with the below key and values and iterate it using enhanced for loop.

key : 10,20,30,40,50,60,10,50,40

values : java,sql,oops,Sql,oracle,DB,selenium,psql,Hadoop.

QUESTION 4.2:

Description : Create a LinkedHashMap with the below key and values and iterate it using enhanced for

loop.

key : 10,20,30,40,50,60,10,50,40 Values : 10,20,30,40,50,60,10,50,40

QUESTION 4.3:

Description : Create a TreeHashMap with the below key and values and iterate it using enhanced for

loop.

key : !,@,#,\$,%,^,&,*,(,

Values: 10,20,30,40,50,60,10,50,409

QUESTION 4.4:

Description : Create a HashTable with the below key and values and iterate it using enhanced for

loop.

Key : vel,Ganesh,Dinesh,Vengat,subash

Values : Selenium, framework, oracle, corejava, jira

QUESTION 5:

QUESTION 5.1:

Description : Create a HashMap with the below key and values and iterate it using enhanced for loop and get the key and values combination.

key : 10,20,30,40,50,60,10,50,40

values : java,sql,oops,Sql,oracle,DB,selenium,psql,Hadoop.

Sample Output:

10

java

20

sq1 30

oops

40

sal

Description : like this you have to itearte the map

QUESTION 5.2:

Description : Create a LinkedHashMap with the below key and values and iterate it using enhanced for loop and get the key and values combination..

key : 10,20,30,40,50,60,10,50,40 Values : 10,20,30,40,50,60,10,50,40

QUESTION 5.3:

Description : Create a TreeHashMap with the below key and values and iterate it using enhanced for loop and get the key and values combination.

key : !,@,#,\$,%,^,&,*,(,

Values: 10,20,30,40,50,60,10,50,409

QUESTION 5.4:

Description: Create a HashTable with the below key and values and iterate it using enhanced for loop and get the key and values combination.

Key : vel,Ganesh,Dinesh,Vengat,subash

Values : Selenium, framework, oracle, corejava, jira

QUESTION 6:

Description: Create a userdefine Map and insert the 10 employee details

Key : empId,name,phone,address,dob,doj,eMail,gender,Sal

Give the related values for key for each employee

QUESTION 7:

Description: Create a userdefine Map and insert the 10 Student details

Key : stdId,stdName,stdPhone,address,dOB,eMail,gender

Give the related values for key for each Student

```
DAY10:
_ _ _ _ _ _
1.Exception
2.throw and throws
3.User define exception
QUESTIONS(Theory)
1.what is Exception?
2.Explain about types of Expection?
3.Difference between checked expection and unchecked expection?
4. What are the differences between exception and error?
5.What is the super class for Exception and Error?
6.Exceptions are defined in which java package
7.What is throw keyword in java?
8.Can we have try block without catch block?
9. Can we write multiple catch blocks under single try block?
10. How to write user defined exception or custom exception in java?
11. What are the different ways to print exception message on console?
12. What are the differences between final finally and finalize in java?
13. Can we write return statement in try and catch blocks?
14. Can we write return statement in finally block?
15. What are the differences between throw and throws?
16.What are the Exception Handling Keywords in Java?
17. Explain Java Exception Hierarchy?
18. How to create custom Exception?
QUESTIONS(Programs)
OUESTION 1:
Description: Find the output for the program:
        public class Test
          public static void main(String[] args)
          try
          {
                System.out.printf("1");
              int sum = 9 / 0;
                System.out.printf("2");
          }
          catch(ArithmeticException e)
          {
                System.out.printf("3");
          }
           catch(Exception e)
          {
                System.out.printf("4");
          }
          finally
          {
             System.out.printf("5");
          }
         }
QUESTION 2:
Description: Find the output for the program:
          public class Test
           private void m1()
```

```
{
           m2();
            System.out.printf("1");
             private void m2()
                {
            m3();
            System.out.printf("2");
           private void m3()
           System.out.printf("3");
          try
          {
                int sum = 4/0;
                System.out.printf("4");
          catch(ArithmeticException e)
          {
               System.out.printf("5");
          }
               System.out.printf("7");
            public static void main(String[] args)
                Test obj = new Test();
               obj.m1();
                }
QUESTION 3:
Description : Find the output for the program:
               public class Test
              public static void main(String[] args)
                  try
                 System.out.printf("1");
                  int data = 5 / 0;
               catch(ArithmeticException e)
               System.out.printf("2");
               System.exit(0);
                 }
               finally
                System.out.printf("3");
               System.out.printf("4");
                 }
                  }
QUESTION 4:
Description : Find the output for the program:
               public class Test
               public static void main(String[] args)
                 {
                 try
                 {
```

```
System.out.printf("1");
                  int data = 5 / 0;
               catch(ArithmeticException e)
               Throwable obj = new Throwable("Sample");
                try
                throw obj;
                catch (Throwable e1)
                System.out.printf("8");
              finally
              System.out.printf("3");
            System.out.printf("4");
                }
QUESTION 5:
Description : Find the output for the program:
              import java.io.EOFException;
              import java.io.IOException;
               public class Test
              public static void main(String[] args)
              try
              System.out.printf("1");
              int value = 10 / 0;
               throw new IOException();
              catch(EOFException e)
            System.out.printf("2");
           catch(ArithmeticException e)
            System.out.printf("3");
           catch(NullPointerException e)
            System.out.printf("4");
           catch(IOException e)
            System.out.printf("5");
               catch(Exception e)
            System.out.printf("6");
```

DAY11:

- 1.JDBC Connection
- 2.Mysql Introduction

QUESTIONS(Theory)

1 116-4 :- 3000)

- 1.What is JDBC?
- 2.What is JDBC Driver?
- 3. What are the steps to connect to the database in java?
- 4.What are the JDBC statements?
- 5.What is the difference between Statement and PreparedStatement interface?
- 6.what is schema?
- 7.what is primary key?
- 8.what is constraints?

QUESTIONS (Program)

Task 1:

Download Sql work bench and do all setup like creating table, assign primary key and retrieve all the values from Demoqa register table (manually).

Input :FirstName,LastName,MaritalStatus(Single,Married,Divorced),

Hobby(Dance,Reading,Cricket),Country,DateOfBirth,PhoneNumber,

Username, E-mail, AboutYourself, Password, ConfirmPassword

Output:

Table Created.

Inserted value in table Deleted value in table Modified value in table

Task 2:

Download Sql work bench and do all setup like creating table, assign primary key and retrieve all the values from employee table.

Input :EmpId(PrimaryKey),EmpName,EmpSalary,EmpAddress

Output:Print all the values from the table

Sample Output:

+		+	+	
EmpId	EmpName	EmpSalary	EmpAddress	
101 102 103 104	Arun Siva Varun Tharun	2000 3000 2000 1000	Chennai Madurai Selam Erode	_
			: :	

```
File Operation:
QUESTIONS (Theory)
1.What is mean by File? In which package it is available? 2.What are the methods available in File?
3.While creating a file if you not mention the format then under which format it will save the file?
4. What are the difference between append and updating the file?
5. How to compare paths of two files?
6. How to create a new file?
7. How to get last modification date of a file?
8. How to create a file in a specified directory?
9. How to check a file exist or not?
10. How to make a file read-only?
11. How to renaming a file ?
12. How to get a file's size in bytes?
13. How to change the last modification time of a file ?
14. How to create a temporary file?
15. How to append a string in an existing file?
16. How to copy one file into another file?
17. How to delete a file?
18. How to read a file?
19. How to write to a file?
20. How to create directories recursively?
21. How to delete a directory?
22. How to get the fact that a directory is empty or not?
23. How to get a directory is hidden or not?
24. How to print the directory hierarchy?
25. How to print the last modification time of a directory?
26. How to get the parent directory of a file?
27. How to search all files inside a directory?
28. How to get the size of a directory?
29. How to traverse a directory?
30. How to find current working directory?
31. How to display root directories in the system?
32. How to search for a file in a directory?
33. How to display all the files in a directory?
34. How to display all the directories in a directory?
QUESTIONS(Practical)
______
OUESTION 1
NOTE: Create a new file
write the file with some 10 lines of text.
QUESTION 2
NOTE: Retrieve the text from the file
Check "java" word contains or not?
QUESTION 3
-----
NOTE: Find the row count from the file.
QUESTION 4
NOTE: Print the last 5 lines from the file.
QUESTION 5
------
NOTE: Print the odd lines from the file.
```

QUESTION 6

NOTE: Count the number of dublicate words available in the file.

QUESTION 7

NOTE: Check directory D:\Java is available or not.

QUESTION 8

NOTE: Check directory D:\Java is available or not.

If not create new directory.

QUESTION 9

NOTE: Create sub directory D:\Java\Selenium\Material.

QUESTION 10

NOTE: Print all the available files from an existing folder.