Practice Questions

Topic: Constructor, instance block, static block

Q1. Write a program to print the names of students by creating a Student class. If no name is passed while creating an object of Student class, then the name should be “Unknown”, otherwise the name should be equal to the String value passed while creating object of Student class.

Q2. Create a class Book with the following information.

Member variables : name (String), author (of the class Book you have just created), price (double), and qtyInStock (int)

[Assumption: Each book will be written by exactly one Author]

Parameterized Constructor: To initialize the variables

Getter methods for all the member variables

In the main method, create a book object and print all details of the book (including the author details)

Q3. Create a class Box that uses a parameterized constructor to initialize the dimensions of a box.The dimensions of the Box are width, height, depth. The class should have a method that can return the volume of the box. Create an object of the Box class and test the functionalities.

Q4. Design an application in java that contains a class Student having properties name and percentage. Create a class Test that declares three instances of Student class. The values are passed through constructor at the time of its object creation. The output should be the name and percentage of the topper.

Q5. Design a program in java that identifies answer to the following questions: (a) What is called first during an object creation, a static block or a constructor?

(b) How many times each (a constructor and a static block) is executed?

(c) Can we use non-static variables inside static methods? Why?

// Question related to scope of variable

// Guess what will be the output of this question

Public class ScopeDemo {

Int z;

Void doStuff()

{ int z = 5;

doStuff2();

System.out.println(z);

}

Void doStuff2() {

Z=4;

}

Public static void main(String args[]){

ScopeDemo myScope = new ScopeDemo();

Int z = 6;

System.out.println(z);

myScope.doStuff();

System.out.println(z);

System.out.println(myScope.z);

}

}

// Topic static and instance block

Q1. Guess what will be the output?

Public class Demo {

Static

{

System.out.println(“inside static block”);

}

Public static int num1 = 56;

}

Public class A {

Public static void main(String args[])

{

System.out.println(Demo.num1);

}

}

Q2. Guess what will be the output?

Public class Demo {

Static

{

System.out.println(“inside static block”);

}

Int num1;

Demo()

{

Num1 = 500;

}

}

Public class A {

Public static void main(String args[])

{

Demo obj1 = new Demo();

System.out.println(obj1.num1);

}

}

What is the output for the below code ?

Public class A {

Public static void main(String args[]){

String[] argh = {“a”,”b”};

Args = argh;

For(var s: args)

{

System.out.println(s);

}

}

Options are:-

A. 6 5 6 4

B. 6 5 5 4

C. 6 5 6 6

D. 6 5 6 5

predict the output

public class Test {

public static void main(String[] args) {

String[] str = {"neeraj","“LA",”University”,”Java”};

System.out.println(str.length);

System.out.println(str.length());

System.out.println(str[0].length());

System.out.println(str[0].length);

}

}

Practice Questions

Topic Array

Q1. Write a Java program to find if the given number is palindrome or not

Example1)

C:\>java Sample 110011

O/P: 110011 is a palindrome

Example2)

C:\>java Sample 1234

O/P: 1234 is not a palindrome

Q2. Write a program to initialize an integer array with values and check if a given number is present in the array or not.

If the number is not found, it will print -1 else it will print the index value of the given number in the array.

Example 1) If the Array elements are {1,4,34,56,7} and the search element is 90, then the output expected is -1.

Example 2)If the Array elements are {1,4,34,56,7} and the search element is 56, then the output expected is 3.

Q3. Initialize an integer array with ascii values and print the corresponding character values in a single row.

Q4. Write a program to print the sum of the elements of an array following the given below condition.

If the array has 6 and 7 in succeeding orders, ignore the numbers between 6 and 7 and consider the other numbers for calculation of sum.

Eg1) Array Elements – 10,3,6,1,2,7,9

O/P: 22

[i.e 10+3+9]

Eg2) Array Elements – 7,1,2,3,6

O/P:19

Eg3) Array Elements – 1,6,4,7,9

O/P:10

Q5. Given an array of type int, print true if every element is 1 or 4.

Only14([1, 4, 1, 4]) → true

Only14([1, 4, 2, 4]) → false

Only14([1, 1]) → true

Q6. Write a program to reverse the elements of a given 2\*2 array. Four integer numbers needs to be passed as Command Line arguments.

Example1)

C:\>java Sample 1 2 3

O/P: Please enter 4 integer numbers

Example2)

C:\>java Sample 1 2 3 4

O/P:

The given array is :

1 2

3 4

The reverse of the array is :

4 3

2 1

Two dimensional Array

1 Introduction to Object-Oriented Java Programming,

2 Procedural Paradigm vs Object-Oriented Paradigm,

3 Features of Object-Oriented Programming,

4 Introduction to Classes, Objects, Data Abstraction, Data Encapsulation, Inheritance, Polymorphism, Code Re-Usability and Data Hiding,

5 Advantages of using Object-Oriented Paradigm.

6 Understanding the compilation process of the JVM,

7 JVM vs JDK vs JRE, JIT

8 Key Features of Java,

9 Structure of a simple Java Program

10 Primitive and non primitive Data Types in Java

11 Names of wrapper class

12 Introduction of “Local Variable Type Inference” in Java 10,

13 Introduction to the new ‘var’ keyword,

14 Type of Variables (Local ,instance , class variables), scope of a variable

15 The Scanner class in java.util package,

16 using command line arguments for accepting user input

17 if, if-else,switch-case, break, continue, for, while, do-while, enhanced for loops.

18 Declaring and initializing one-dimensional and two-dimensional arrays in Java( Array of arrays concept),

19 using the for-each loop with arrays.,Passing array to method Anonymous arrays , object etc

20 Type conversion (implicit type conversion and explicit type conversion )

21 Introduction to object class

22 The String data type, commonly used methods from the String API (toString, equals, equalsIngoreCase, length, toCharArray, compareTo, replace, toLowerCase, toUpperCase, substring),

23 StringBuilder,StringBuffer.

24 Signature of a method (access modifier, non-access modifiers, return type, method name, parameter list),types of methods, static and non-static methods

25 overloading and overriding concept

26 Class elements (variables, methods, constructors, blocks) The General Form of class,Instance Variables / Fields,Instance Methods, Instance block ,Static Variables / Fields , Static Method, Static block

27 Inheritance Relationships between classes

28 Constuctors: Non – Parameterized & Parameterized,Constructor Overlaoding

29 this keyword, super keyword, constructor chaining using this() and super()

30 Use of final modifier with variable , method and class

31 Defining a Package, Packages and Member Access,Importing Package,Static import

32 Access Specifiers / Modifiers: default, public, private, protected

33 Interface concept,Properties of Interface, Defining an Interface,Implementing an Interface,Variables in Interface,Abstract methods, Default method ,Static method ,Private method in Interface,Marker Interface

34 Need of Abstract class,Declaring abstract class, Variables in abstract class ,Methods in Abstract class, Constructor in Abstract class

35 Nesting of classes (Static inner class, Member inner class , local class, Anonymous class)

36. Inheritance and Types of inheritance , use of implements and extends keyword

Practice Questions

Q1. Create a class Car having properties manufacturer and price. Create three instances of the class and display the details of each car sorted with respect to the price.

Q2. Design a class Room that has properties AC\_ON, HOME\_THEATRE\_ON, FAN\_ON and LIGHT\_ON that stores Boolean values to indicate whether the appliance is ON or OFF. Design a menu driven program in java that puts ON/OFF the corresponding appliances and gives appropriate message. If the total power consumed is more than 2kW, show a message Overload. Assume AC consumes 1200 watts, Home Theatre consumes 600 watts, Fan consumes 400 watts and light consumes 100 watt.

Q3. Design a java program to display the number of instances created so far of a specific class.

Q4. Design an application in java that contains a class Student having properties name and percentage. Create a class Test that declares three instances of Student class. The values are passed through constructor at the time of its object creation. The output should be the name and percentage of the topper.

Q5. Create a class ‘Student’ with three data members which are name, age and address. The constructor of the class assigns default values name as “unknown”, age as ‘0’ and address as “not available”. It has two member methods with the same name “setInfo”. First method has two parameters for name and age and assigns the same whereas the second method takes three parameters which are assigned to name, age and address respectively. Print the name, age and address of 10 students.

Q6. Suppose you have a Piggie Bank with an initial amount of 50 and you have to add some more amount to it. Create a class ‘AddAmount’ with a data member named ‘amount’ with an initial value of 50. Now make two constructors of this class as follows:

1 – without any parameter – no amount will be added to the Piggie Bank

2 – having a parameter which is the amount that will be added to Piggie Bank

Create object of the ‘AddAmount’ class and display the final amount in Piggie Bank.

Q7. Create a class named ‘Programming’. While creating an object of the class, if nothing is passed to it, then the message “I love programming languages” should be printed. If some String is passed to it, then in place of “programming languages” the name of that String variable should be printed.

For example, while creating object if we pass “Java”, then “I love Java” should be printed.

Q8. Create a new class called Calculator with the following methods:

1. A static method called powerInt(int num1,int num2)

This method should return num1 to the power num2.

1. A static method called powerDouble(double num1,int num2).

This method should return num1 to the power num2.

1. Invoke both the methods and test the functionalities.

Hint: Use Math.pow(double,double) to calculate the power.

Q9. Create class Number with only one private instance variable as a int primitive type. Initialize it with parameterised constructor and include the following methods isZero( ), isPositive(), isNegative( ), isOdd( ), isEven( ), isPrime(), isAmstrong()

The above methods return boolean primitive type value.

getFactorial(), getSqrt(), getSqr(), sumDigits() these methods return int primitive type value.

dispBinary(), dispOctal(), displayhexa() these method return string value

Q10. Create an int array of size 5, initialize it with values(10,20,30,40,50). Create a public boolean search(int arr[], int search\_element) this method will return true if the search element is present in the array else it will print a message “element not found”

Write an interface called Playable, with a method

Void play();

Let this interface be placed in a package called music.

Write a class called Veena which implements Playable interface. Let this class be placed in a package music.string

Write a class called Saxophone which implements Playable interface. Let this class be placed in a package music.wind

Write another class Test in a package called live. Then,

a. Create an instance of Veena and call play() method

b. Create an instance of Saxophone and call play() method

c. Place the above instances in a variable of type Playable and then call play()

Create an abstract class Compartment to represent a rail coach. Provide an abstract function notice in this class.

Public abstract String notice();

Derive FirstClass, Ladies, General, Luggage classes from the compartment class. Override the notice function in each of them to print notice message that is suitable to the specific type of compartment.

Create a class TestCompartment.Write main function to do the following:

Declare an array of Compartment of size 10.

Create a compartment of a type as decided by a randomly generated integer in the range 1 to 4.

Check the polymorphic behavior of the notice method.

[i.e based on the random number genererated, the first compartment can be Luggage, the second one could be Ladies and so on..]

1. Write a program to create interface named test. In this interface the member function is square. Implement this interface in arithmetic class. Create one new class called ToTestInt in this class use the object of arithmetic class.

2. Create an outer class with a function display, again create another class inside the outer class named inner with a function called display and call the two functions in the main class.

3. Create class point with following instance variable and methods.

Instance variable: private int x,y

Constructors : public Point(), Point(int x, int y)

Methods : public void setX(int x), setY(int y), setXY(int x, int y)

1. Create class box and box3d. Box3d is extended class of box. The above

Two classes going to pull fill following requirement

Include constructor.

Set value of length, breadth, height Find out area and volume.

Note: Base class and sub classes have respective methods and instance variables.

Create an abstract class Instrument which is having the abstract function play.

Create three more sub classes from Instrument which is Piano, Flute, Guitar. Override the play method inside all three classes printing a message

“Piano is playing tan tan tan tan ” for Piano class

“Flute is playing toot toot toot toot” for Flute class

“Guitar is playing tin tin tin ” for Guitar class

You must not allow the user to declare an object of Instrument class.

Create an array of 10 Instruments.

Assign different type of instrument to Instrument reference.

Check for the polymorphic behavior of play method.

Use the instanceof operator to print that which object stored at which index of instrument array.

1) Create a package called com.automobile. Define an abstract class called Vehicle.

Vehicle class has the following abstract methods:

Public String getModelName()

Public String getRegistrationNumber()

Public String getOwnerName()

Create TwoWheeler subpackage under Automobile package

Hero class extends Automobile.vehicle class

Public int getSpeed()

* Returns the current speed of the vehicle.

Public void radio()

* Provides facility to control the radio device

Honda class extends com.automobile.vehicle class

Public int getSpeed()

* Returns the current speed of the vehicle.

Public void cdplayer()

* Provides facility to control the cd player device which is available in the car.

Create a test class to test the methods available in all these child class.

Challenge for all of you

Try to solve the following question TOPIC IS — INTERFACE A library needs to develop an online application for two types of users/roles, Adults and children. Both of these users should be able to register an account.

Any user who is less than 12 years of age will be registered as a child and they can borrow a “Kids” category book for 10 days, whereas an adult can borrow “Fiction” category books which need to be returned within 7 days.

Note: In future, more users/roles might be added to the library where similar rules will be enforced.

Develop Interfaces and classes for the categories mentioned above.

1. Create an interface LibraryUser with the following methods declared,

Method Name

registerAccount

requestBook

1. Create 2 classes “KidUsers” and “AdultUser” which implements the LibraryUser interface.
2. Both the classes should have two instance variables as specified below.

Instance variables Data type

Age int

bookType String

1. The methods in the KidUser class should perform the following logic.

registerAccount function:

if age < 12, a message displaying “You have successfully registered under a Kids Account” should be displayed in the console.

If(age>12), a message displaying, “Sorry, Age must be less than 12 to register as a kid” should be displayed in the console.

requestBook function:

if bookType is “Kids”, a message displaying “Book Issued successfully, please return the book within 10 days” should be displayed in the console.

Else, a message displaying, “Oops, you are allowed to take only kids books” should be displayed in the console.

1. The methods in the AdultUser class should perform the following logic.

registerAccount function:

if age > 12, a message displaying “You have successfully registered under an Adult Account” should be displayed in the console.

If age<12, a message displaying, “Sorry, Age must be greater than 12 to register as an adult” should be displayed in the console.

requestBook function:

if bookType is “Fiction”, a message displaying “Book Issued successfully, please return the book within 7 days” should be displayed in the console.

Else, a message displaying, “Oops, you are allowed to take only adult Fiction books” should be displayed in the console.

1. Create a class “LibraryInterfaceDemo.java” with a main method which performs the below functions,

Test case #1:

Create an instance of KidUser class.

Set the age as specified in the below table and invoke the registerAccount method of the KidUser object

Age

10

18

Set the book Type as specified in the below table and invoke the requestBook method of the KidUser object,

BookType

“Kids”

“Fiction”

Test case #2:

Create an instance of AdultUser class.

Set the age as specified in the below table and invoke the registerAccount method of the AdultUser object

Age

5

23

Set the book Type as specified in the below table and invoke the requestBook method of the AdultUser object

BookType

“Kids”

“Fiction”

3) Create a base class Fruit which has name, taste and size as its attributes. A method called eat() is created which describes the name of the fruit and its taste. Inherit the same in 2 other classes Apple and Orange and override the eat() method to represent each fruit taste.

2) A HighSchool application has two classes: the Person superclass and the Student subclass. Using inheritance, you will create two new classes, Teacher and CollegeStudent. A Teacher will be like Person but will have additional properties such as salary (the amount the teacher earns) and subject (e.g. “Computer Science”, “Chemistry”, “English”, “Other”). The CollegeStudent class will extend the Student class by adding a year (current level in college) and major (e.g. “Electrical Engineering”, “Communications”, “Undeclared”).

4) Write a program to create a class named shape. It should contain 2 methods- draw() and erase() which should print “Drawing Shape” and “Erasing Shape” respectively.

For this class we have three sub classes- Circle, Triangle and Square and each class override the parent class functions- draw () and erase ().

The draw() method should print “Drawing Circle”, “Drawing Triangle”, “Drawing Square” respectively.

The erase() method should print “Erasing Circle”, “Erasing Triangle”, “Erasing Square” respectively.

Create objects of Circle, Triangle and Square in the following way and observe the polymorphic nature of the class by calling draw() and erase() method using each object.

Shape c=new Circle();

Shape t=new Triangle();

Shape s=new Square();

Topic :- String/ StringBuffer

Q1. Write a program that will check whether a given String is Palindrome or not.

Q2. Given two strings, append them together (known as “concatenation”) and return the result. However, if the concatenation creates a double-char, then omit one of the chars. If the inputs are “Mark” and “Kate” then the output should be “markate”. (The output should be in lowercase)

Q3. Given a string, return a new string made of n copies of the first 2 chars of the original string where n is the length of the string. The string may be any length. If there are fewer than 2 chars, use whatever is there.

If the input is “Apple” then the output should be “ApApApApAp”

Q4. Given two strings, a and b, create a bigger string made of the first char of a, the first char of b, the second char of a, the second char of b, and so on. Any leftover chars go at the end of the result.

If the inputs are “Hello” and “World”, then the output is “HWeolrllod”.

Q5. Given a string and an int n, return a string made of n repetitions of the last n characters of the string. You may assume that n is between 0 and the length of the string, inclusive. For example, if the inputs are “Niraj” and 3, then the output should be “rajrajraj”.

Q2. At GLA College of Programming, the final school fees to be paid is calculated as follows.

* Original Fees should be greater than or equal to R50 000
* Minimum fixed deposit of R10 000
* If a deposit is greater than pr equal to half the original fees, you get a 5% discount from the original fees

• Final total fees will also include the following

1. School Levy is 10% of original fees

2. Sports fee is 5% of the original fees.

Write a program the calculates the final total fees to be paid.

Program must request user to enter original fees value greater then R50 000.

Program should also request user to enter amount to deposit before calculating final total fees.

Q3. Create a class named ‘Member’ having the following members:

Data members

1 – Name

2 – Age

3 – Phone number

4 – Address

5 – Salary

It also has a method named ‘printSalary’ which prints the salary of the members.

Two classes ‘Employee’ and ‘Manager’ inherits the ‘Member’ class. The ‘Employee’ and ‘Manager’ classes have data members ‘specialization’ and ‘department’ respectively. Now, assign name, age, phone number, address and salary to an employee and a manager by making an object of both of these classes and print the same.

Q4. Santa runs a local musical equipment store in your neighbourhood. He has contracted you to create an interactive application that will assist him with customer purchases. Create a class named

Customer Purchases that will contain get and set methods for a customer number, first name, surname, product, price and quantity. Create a separate class called Printing that will include a method called Print Details, that will print the Customer Invoice. In the Printing class include another method called Customer Purchase Report which will display the following information:

REPORT OPTION PERCENTAGE

TAX 15%

COMMISSION 8.5%

DISCOUNT 10%

TOTAL (Price + Tax) – (Discount + Commission)

In your main class, capture all the customer purchase details required to produce the reports.

Write a program that takes as input the size of the array and the elements in the array. The program then asks the user to enter a particular index and prints the element at that index. Index starts from zero.

This program may generate Array Index Out Of Bounds Exception or NumberFormatException . Use exception handling mechanisms to handle this exception.

Sample Input and Output 1:

Enter the number of elements in the array

2

Enter the elements in the array

50

80

Enter the index of the array element you want to access

1

The array element at index 1 = 80

The array element successfully accessed

Sample Input and Output 2:

Enter the number of elements in the array

2

Enter the elements in the array

50

80

Enter the index of the array element you want to access

9

Java.lang.ArrayIndexOutOfBoundsException

Sample Input and Output 3:

Enter the number of elements in the array

2

Enter the elements in the array

30

J

Java.lang.NumberFormatException

Write a Program to take care of Number Format Exception if the user enters values other than integer for calculating the average marks of 2 students. The name of the students and marks in 3 subjects are taken from the user while executing the program.

In the same Program write your own Exception classes to take care of Negative values and values out of range (i.e. other than in the range of 0-100). Exception Handling: Throw & User Defined Exception

Write a class MathOperation which accepts 5 integers through command line. Create an array using these parameters. Loop through the array and obtain the sum and average of all the elements and display the result.

Various exceptions that may arise like ArithmeticException, NumberFormatException, and so on should be handled.

Create two threads and assign names ‘Scooby’ and ‘Shaggy’ to the two threads. Display both thread names.

Write a program to accept name and age of a person from the command prompt(passed as arguments when you execute the class) and ensure that the age entered is >=18 and < 60.

Display proper error messages.

The program must exit gracefully after displaying the error message in case the arguments passed are not proper.

(Hint : Create a user defined exception class for handling errors.)

A student portal provides user to register their profile. During registration the system needs to validate the user should be located in India. If not the system should throw an exception.

Step 1: Create a user defined exception class named “InvalidCountryException”.

Step 2: Overload the respective constructors.

Step 3: Create a main class “UserRegistration”, add the following method,

Void registerUser(String username,String userCountry) with the below implementation

• if userCountry is not equal to “India” throw a InvalidCountryException with the message “User Outside India cannot be registered”

• if userCountry is equal to “India”, print the message “User registration done successfully”

Invoke the method registerUser from the main method with the data specified and see how the program behaves.

Example1)

i/p:Mickey,US

o/p:InvalidCountryException should be thrown.

The message should be “User Outside India cannot be registered”

Example2)

i/p:Mini,India

o/p:User registration done successfully

store colours in the form of an array

Ex: String colours[]={“white”,”blue”,”black”,”green”,”red”,”yellow”};

Display all colours repeatedly by generating colour index from Random class. If the random colour index matches to red stop display.

Note: perform this task by implementing Runnabe interface

Create a thread which prints 1 to 10. After printing 5, there should be a delay of 5000 milliseconds before printing 6. ( Thread Control Mechanism concept)

Create two threads, one thread to display all even numbers between 1 & 20, another to display odd numbers between 1 & 20.

Note: Display all even numbers followed by odd numbers

Hint: use join. (use of join method and thread control mechanism)

A program to demonstrate custom exceptions. Create a com.myname.stuent.Student class with three private fields name, rollNo, & CPI. Create Getter and Setter for all the fields, override the public String toString() method of Object class, to represent Student objects as String. Create a com.myname.main.StudentMain class which is the implementation class contains main method and a search() method. Main method will create a list of students i.e array and initialize each objects by taking input from user using java.util.Scanner class. This method will also call search method and print the result. Search() method will accept two arguments first is Student[] list and int rollNo. This method will return Student object if rollNo matches with any of the Student object or else it will throw an user defined exception InvalidStudentException. Com.myname.exception.InvalidStudentException is a class which extends java.lang.Exception class and have one parameterized constructor which accept an argument String message.

Create three threads- with different priorities – MAX, MIN, NORM- and start the threads at the same time. Observe the completion of the threads. (Thread priorities concept)

Write a java program that establishes a connection to mysql database successfully. If the connection is successful, it should display a message “Connection Established successfully”. In case, it is not able to do so due to any exception, it should display the message “Connection could not be established “. If there is an exception, it should also display the description of the exception.

PART1) Write a java program that connects to the Mysql database, queries the inbuilt table “emp” and displays the first two columns (empno using column index and ename using column name ) of all the rows. PART 2) Modify the above program to display all the rows where sal is greater than 1000 and less than 2000. Display the columns ename, job, sal and comm.

Regex Question

Q Write a regular expression to represent all names start with N | n with any length

Q. Write a regular expression to represent all names end with J | j

Q Write a regular expression to represent all names start with N|n and ends with j|J

Q. Write a program to check whether the given no is a valid mobile number or not? The mobile no is entered by the command line argument

Q. Write a program to check whether the given mail id is valid or not

Q. Write a program in java to check string contains special characters in java

[a-zA-Z0-9][a-zA-Z0-9\_.]\* @[a-zA-z0-9]+([.][a-zA-Z))+

Try this Regular Expression for [abc@gla.ac.in](mailto:abc@gla.ac.in)

import java.util.ArrayList;

Public class BoundedType<T extends Number > {

Public static void main(String[] args) {

BoundedType<Integer> obj = new BoundedType<>();

}

}

Bounded Type Generic representation

Challenge Solve the question of JDBC by using PreparedStatement 👇

Develop a jdbc program containing main method, which should instantiate a class called DAOClass, which should contain methods called insert, delete, modify and display. Description of what each of these methods are expected to do is given below. Necessary details required for executing these methods, are passed from command line argument. For e.g. If the name of the class containing the main method is JDBCCalls, then if you want to insert a record, you will execute this class as java JDBCCalls 1 101 “Ajit” “IV” “20-Nov-2001” 4000

Where 1 is the option for inserting the record and all other details are the values for the columns in each row of the student table. The structure of student table is given below. Similarly, for deleting a record, you have to execute the code as

Java JDBCCalls 2 101

Where 2 is the option for deleting a record and 101 is the rollno of the student, whose record has to be deleted.

For modifying a record, you will use

Java JDBCCalls 3 101 4500, where 3 is the option for modifying a record and the 4500 is the new fee which needs to replace the old fee value.

For Displaying records, if the main class is executed as follows

Java JDBCCalls 4 101

It should display only one record, that of the student with roll no. 101. 4 option is for displaying the record.

If the main class is executed as

Java JDBCCalls 4 (without specifying the rollno.), it means that details of all the students should be displayed.