

GLS UNIVERSITY
Bachelor of Computer Applications (BCA)
(Core Course)
Semester-III
210301305 PRACTICALS ON CORE JAVA
Assignment 2
Unit-2 Java Programming Constructs Classes Vectors and
Array

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| 1. Write a Java program that will create class room having length and breadth as data members and add two methods getData() and area() as member function. Ask user to input room dimensions (l*b) and calculates the area. |
| 2. Write a Java program that will create class named college and create object of that class and print the member of class. |
| 3. Write a Java program that will create class to represent bank account having following Data members :
Name of depositor
Account Number
Type of account
Balance
Member Methods :
To assign initial value using constructor
To deposit amount
To withdraw amount after checking balance
Display name and balance |
| 4. Write a Java program to create a class called Product. Each product has a name, a product code, and manufacturer name. Define variables, methods, and constructor for the product class. Write a class called TestProduct with the main method to test the methods and constructors of the Product class. |
| 5. Write a Java program to create Class CalculateSquare. Define three different methods that calculates square of number with no parameter, with integer parameter and with float parameter respectively. (Use Method Overloading concept). Create another class DisplaySquare which contains main method and create the object of the CalculateSquare class and access all the data members and methods of it. |
| 6. |
| 7. Create a class called Word and define a static method displayWordStatus() which displays on standard output word, total no of characters in the word and the number of vowels in the word. |

7. Write a Java program to create an array with 10 values. Sort all the values in ascending order. Take all the values from user using Scanner Class.

8. Write a Java program to create a method named maximum() to find Maximum value from the array.

Note.: Pass an array as argument to the method.

9. Write a Java program to demonstrate use of this Keyword. Check whether this can access private members of the class or not.

10. Write a Java program to create a class Student having roll no and marks of 3 subjects as its data members.

Create an array of class objects of minimum 5 objects.

Create member methods for the following:

Total marks obtained by students

Highest marks in each subject and roll no of student who secured it.

Students who obtained highest total marks.

11. Write a Java program to find average and sum of the N number using command line argument.

12. Define a class called StatisticalData which manage a number of readings of type int. Provide a method to setData available in the form of an array, a method add to individually and data of type int, a method to reset the entire data, and methods to return the following statistics:

Mean

Median

Mode

13. Write a Java program to print a pyramid with 5 lines.

The first line has one character, second line has two character and so on. The character to be used in the pyramid is taken as a command line argument.



