BRAINWARE UNIVERSITY

ASSIGNMENT 4

[MCA291] [Core Java and Advanced Java Lab]

Session 4

1) Write a method named div() that takes two arguments of either integer or float type and returns their division either as int or as float depending upon its arguments data type.
2) Write a class rectangle that has two constructors(with two arguments and one argument) to create objects as rectangle or square. It has a method called area() that returns the area of the corresponding object.
3) Write a class Calculator that has the following members:
   a) Two int: opp1 & opp2
   b) Four methods:
      Add(), Subtract(),Multiply() & Divide()
      The functions will return the result of the corresponding operation into opp1 and opp2 variables

   Take user's choice .

Session 6

1) Modify the class you created in Session 4 questi on 2. Overload area() function by passing two arguments and returns a new object that has the area equals to the area of its argument.
2) Create a class Fruit which is abstract in nature. Try to create an object of the class and see the compiler's response.
3) Create a class Winamp that has a final method called play(). Again create another derived class called WinampNextgen from Winamp and try to override the play() method. See the compiler's output.

Session 7

1) Create a package and place the Calculator class o f Session 4 question 4 into that package.
   a) Use the instance of that class within another class from a different package.
   b) Write a class that inherits the above Calculator class to override the method divide() so that the devisor cannot be zero.
      i) Place the class in the same package.
      ii) Place it in a different package

   Test the above class with different access specifiers.

Session 8

1) Write a class that has the following members:
   a) An int[] of 10 elements: arr[10]
   b) Void add(int) to add integers into that array s equentially.
   c) Int out(void) to take out the integers from that array following LIFO pattern

Write a menu-driven program to implement that class

2) Write a java program that will contain two arrays. In the first array store the following computer peripherals name:
   a) Monitor
   b) CPU
   c) Mouse
   d) Keyboard
   e) Modem
   f) Printer

   And store the following ID in the second array
   a) 60
   b) 30
   c) 90
   d) 80
   e) 40
   f) 50

Write a method that will display the products with their corresponding ID

3. Take a int[][] of length 4 * 4 and display its conten ts in a 4*4 matrix format.
4. Accept a word and find out the length of the word and display it using array.
5. Write a program to add two 2D matrix using 2D arrays and store the added matrix in a third 2D array an display the content.