Practical 6

1. Create an abstract class Calculator with instance variable int x, int y. Create constructor to initialize instance variable and create normal method findSum() that prints the sum of x and y and two abstract method findDIff() that prints difference and findMulti() that returns the multiplication. After this create a class Solution that inherits abstract class Calculator. Solution class contain two instance variable a and b both in int and one method calcDiv() that prints division. Use constructor to initialize the instance variable. Now create AbstractDemo class and show implementation of abstract class.
2. Create an interface named Num with two functions int add (int x, int y) and int diff (int x, int y) then make a class Solve that implements that interface Num.
3. Create an interface called Number with two abstract methods int square (int x) and int cube (int x). Then create a class NumberDemo which implements Number interface and overrides the methods. Now create NumberDemo class and show interface implementation.
4. Demonstrate method overriding condition.
5. Demonstrate multiple inheritance using interface
6. Demonstrate inheritance in interface (extending the interface).
7. Demonstrate how reference of interface can be used to call methods of interface.
8. Write a program to demonstrate multithreading using both Thread class and Runnable interface.
9. Demonstrate the use of try... catch?
10. Demonstrate the use of nested try catch.
11. Demonstrate the use of multiple catch statement.
12. Demonstrate how custom exception can be made using Exception class.
13. Demonstrate the use of throw and throws.

Practical 7

1. Write a program to demonstrate array, array list, linked list and hash map.
2. Write a program to demonstrate wrapper class, method of wrapper class and enumeration.
3. Create a file called "prime.txt" and then store basic information about college like name, address and number of students enrolled in it. Then user is required to enter information of three different college.
4. A data file "tu.txt" contains some text. Write a program that reads the content of "tu.txt" and display them. Also count the number of character and print the number of characters.
5. Demonstrate the concept of serialization
6. Demonstrate any eight-string handling function

Practical 8

1. Write a program to demonstrate mouse event and key event using listener.
2. Create two four button and one text field. If 1st button is clicked display first button is clicked in text field and same for all other button.
3. Create one complete form using swing (username, password, repassword, radio button, check box, submit and reset button). validate the form (check for emptiness, password and repassword should be equal) and display the content in label.
4. Write a program to demonstrate different kinds of layout manager (null, flow, grid, border, card).
5. Write a GUI application to find sum and difference of two integer number. Use two text fields for input and third text field for output. Your program should display sum if the user presses the mouse and difference if the user releases the mouse.
6. Write a program to create a table "tbl_registration" having column id int primary key, username varchar, password, repassword, gender varchar, course varchar, country varchar in database "db_prime". Now, insert any 10 data in table, display all the data, update course to "BCA" and country to "Japan" for a person having id 1. Delete the record of person whose gender are male.
7. For the table created in question number 16. Insert any 20 data by taking input from user (prepared statement), display the record of person whose id is given by user, delete the record of person whose name is give by user.