

# **MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

## **Department of IT PROGRAMMING LAB**

**160405**

### **List of Experiments**

1. WAP in java Program to accepts two numbers (int) as command line arguments and print their Sum.
2. Write a java program to print Fibonacci series without using recursion and using recursion.
3. Write a java program to check prime number.
4. Write a java program to check palindrome number.
5. Write a java program to sort an array elements using bubble sort algorithm.
6. Write a java program to sort an array elements using insertion sort algorithm.
7. Write a non-static function in java that prints the sum of two numbers.
8. WAP in java in which class A extends Class B. what is the order of the execution of the constructors if object of class B is created.
9. Create an abstract class Shape which has a field  $PI=3.14$  as final and it has an abstract method Volume. Make two subclasses Cone and Sphere from this class and they print their volume.
10. Write a Java program that works as a simple calculator. Use a grid layout to arrange buttons for the digits and for the +, -, \*, % operations. Add a text field to display the result. Handle any possible exceptions like divide by zero.
11. Develop an Applet that receives an integer in one text field & compute its factorial value & returns it in another text field when the button "Compute" is clicked
12. Write a program that creates a user interface to perform integer divisions. The user enters two numbers in the text fields, Num1 and Num2. The division of Num1 and Num2 is displayed in the Result field when the Divide button is clicked. If Num1 or Num2 were not an integer, the program would throw a NumberFormatException. If Num2 were Zero, the program would throw an Arithmetic Exception Display the exception in a message dialog box
13. Write a java program that implements a multi-thread application that has three threads. First thread generates random integer every 1 second and if the value is even, second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of cube of the number.
14. Write a java program that simulates a traffic light. The program lets the user select one of three lights: red, yellow, or green with radio buttons. On selecting a button, an appropriate message with "stop" or "ready" or "go" should appear above the buttons in a selected color. Initially there is no message shown.

# **MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

15. Write a java program that reads on file name from the user, then displays information about whether the file exists, whether the file is readable, whether the file is writable, the type of file and the length of the file in bytes?
16. Write a java program to design the page authenticating user name and password by using SWING,
17. Write a java program that implements a simple client server application, The client sends data to server. The server receives the data uses it to produce a result and then sends the result back to the client then the client displays the result on the console.



**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)  
**Department of CSE&IT**

**PROGRAMMING LAB**

**160405**

**List of Experiments**

1. WAP in java Program to accepts two numbers (int) as command line arguments and print their sum.
2. Write a java program to print Fibonacci series without using recursion and using recursion.
3. Write a java program to check prime number.
4. Write a java program to check palindrome number.
5. Write a java program to sort an array elements using bubble sort algorithm.
6. Write a java program to sort an array elements using insertion sort algorithm.
7. Write a non-static function in java that prints the sum of two numbers.
8. WAP in java in which class A extends Class B. what is the order of the execution of the constructors if object of class B is created?
9. Create an abstract class Shape which has a field  $PI=3.14$  as final and it has an abstract method Volume. Make two subclasses Cone and Sphere from this class and they print their volume.
10. Write a Java program that works as a simple calculator. Use a grid layout to arrange buttons for the digits and for the +, -, \*, % operations. Add a text field to display the result. Handle any possible exceptions like divide by zero.
11. Develop an Applet that receives an integer in one text field & compute its factorial value & returns it in another text field when the button "Compute" is clicked
12. Write a program that creates a user interface to perform integer divisions. The user enters two numbers in the text fields, Num1 and Num2. The division of Num1 and Num2 is displayed in the Result field when the Divide button is clicked. If Num1 or Num2 were not an integer, the program would throw a NumberFormatException. If Num2 were Zero, the program would throw an Arithmetic Exception Display the exception in a message dialog box
13. Write a java program that implements a multi-thread application that has three threads. First thread generates random integer every 1 second and if the value is even, second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of cube of the number.
14. Write a java program that simulates a traffic light. The program lets the user select one of three lights: red, yellow, or green with radio buttons. On selecting a button, an appropriate message with "stop" or "ready" or "go" should appear above the buttons in a selected color. Initially there is no message shown.
15. Write a Java program that reads on file name from the user, then displays information about whether the file exists, whether the file is readable, whether the file is writable, the type of file and the length of the file in bytes?
16. Write a java program to design the page authenticating user name and password by using SWING.
17. Write a java program that implements a simple client server application. The client sends data to server. The server receives the data uses it to produce a result and then sends the result back to the client then the client displays the result on the console.