Object Oriented Programming Lab List

1. Write a Java program to compute body mass index (BMI).

Test Data

Input weight in pounds: 452 Input height in inches: 72

Expected Output:

Body Mass Index is 61.30159143458721

2. Write a Java program that takes the user to provide a single character from the alphabet. Print Vowel or Consonant, depending on the user input. If the user input is not a letter (between a and z or A and Z), or is a string of length > 1, print an error message.

Test Data:

Input an alphabet: p Expected Output:

Input letter is Consonant

3. Write a Java program to find the index of an array element.

Sample input output:

25, 14, 56, 15, 36, 56, 77, 18, 29, 49

25

Index position of 25 is: 0

77

Index position of 77 is: 6

4. Write a Java program to test if a given string contains the specified sequence of char values.

Sample Output:

Original String: PHP Exercises and Python Exercises

Specified sequence of char values: and

true

5. Write a Java program to find first non repeating character in a string.

Sample Output:

The given string is: gibblegabbler

The first non repeated character in String is: i

6. Write a Java Program that reads a line of integers, and then displays each integer, and the sum of all the integers (Use StringTokenizer class of java.util)

7. Write a Java program for sorting a given list of names in ascending order. (use proper exception handling mechanism, if needed).

Test Data:

Enter the value of n:

3

Enter strings:

Rahim

Karim

Sabina

Sorted list of strings is:

Karim

Rahim

Sabina

8. Write a Java program that reads a 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.

Output:

file is exist and details about file....

File name:java manual.rtf

Absolute path:e:\java programs\java manual.rtf

file is readable

file is writable

f is file

9. Write a Java program that creates three threads. First thread displays "Good Morning" everyone second, the second thread displays "Hello" every two seconds and the third thread displays "Welcome" every three seconds.

Output:

press Ctrl+c to stop......

Good Morning

Hello

Welcome

Good Morning

Good Morning

Hello

Good Morning

Welcome

Good Morning

Hello

Good Morning

Welcome

Good Morning

Hello

Good Morning

Good Morning

Hello

10. Write a program that creates a user interface to perform integer divisions. The user enters two numbers in the textfields, 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 ArithmeticException Display the exception in a message dialog box.

Output





