Day 1 Java lab exercise

1. Write a Java program to print the result of the following operations.

Test Data:

a. -5 + 8 \* 6

b. (55+9) % 9

c. 20 + -3\*5 / 8

d. 5 + 15 / 3 \* 2 - 8 % 3

2. Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers.

Test Data: Input first number: 20 Input second number: 4

3. Write a Java program that takes three numbers as input to calculate and print the average of the numbers.

4. Write a Java program to swap two variables.

5. Write a java program, which will take a number variable and check whether the number is prime or not.

Note: Prime number is a number that is greater than 1 and divided by 1 or itself only. For example, 2, 3, 5, 7, 11, 13, 17.... are the prime numbers

6. Write a Java program to print the ascii value of a given character.

7. Write a Java program which iterates the integers from 1 to 100. For multiples of three print "Fizz" instead of the number and print "Buzz" for the multiples of five. When number is divided by both three and five, print "fizz buzz".

Ex : 3 : fizz

5 : buzz

6 : fizz

9 : fizz

10 : buzz

8. Write a program to read a number and calculate the sum of odd digits (values) present in the given number.

Create a class with a static method checkSum which accepts a positive integer. The return type should be 1 if the sum is odd. In case the sum is even return -1 as output.

Create a class Main which would get the input as a positive integer and call the static method checkSum present in the UserMainCode.

Sample Input 1:

56895

Sample Output 1:

Sum of odd digits is odd.

Sample Input 2:

84228

Sample Output 2:

Sum of odd digits is even.

9. Write a program to read a number, calculate the sum of squares of even digits (values) present in the given number.

Create a class UserMainCode with a static method sumOfSquaresOfEvenDigits which accepts a positive integer. The return type (integer) should be the sum of squares of the even digits.

Create a class Main which would get the input as a positive integer and call the static method sumOfSquaresOfEvenDigits present in the UserMainCode.

Sample Input 1:

56895

Sample Output 1:

100

10. Write a Program which finds the longest word from a sentence. Your program should read a sentence as input from user and return the longest word. In case there are two words of maximum length return the word which comes first in the sentence.

Include a class UserMainCode with a static method getLargestWord which accepts a string The return type is the longest word of type string.

Create a Class Main which would be used to accept two Input strings and call the static method present in UserMainCode.

Sample Input 1:

Welcome to the world of Programming

Sample Output 1:

Programming

Sample Input 2:

ABC DEF

Sample Output 2:

ABC