

CSE1007 – JAVA PROGRAMMING

ASSESSMENT NO.01

DEADLINE: 18-08-2022

1. Develop a Java program to check the reverse of a given number is prime or not.
2. Develop a Java program to find the string with maximum length among the set of strings
3. Develop a Java program to search for the below listed input format and display the position
 - a. Number in a set of numbers
 - b. Character in a set of characters
 - c. String in a set of Strings
4. Define a class Complex containing data members for real and imaginary. Write appropriate methods for addition and subtraction between them.
5. Write an application that reads several lines of text and prints a table indicating the number of occurrences of each different word in the text. For example, let the sample text, To be or not to be: contains the word "to" two times, "be" two times and so on. Also display in table format the number of one letter words, two letter words etc., appearing in the text. Use String classes for functionalities.
6. A company pays its employees on a weekly basis. The company has four types of employees: **salaried employees**, who are paid a fixed weekly salary regardless of the number of hours worked; **hourly employees**, who are paid by the hour and receive overtime pay; **commission employees**, who are paid a percentage of their sales; and **salaried commission employees**, who receive a base salary plus a percentage of their sales. For a current pay period, the company has decided to reward salaried commission employees by adding 10% to their salaries. The company wants to implement a java application that performs its payroll calculations polymorphically.
7. Develop a program to count number of objects created by the class. Use Static variables and Static functions.
8. Define a Shape class and extend Circle, Triangle and Square from Shape class. Override the method area() to compute area as per the shape name. Define a driver class demonstrating polymorphic behaviour among them.
9. Develop a java program to convert the input string into the format given below: "I love Java" as "aIa aevola aavaJa"