

CS203 Java Programming and Applications Fall 2022

Assignment II

Date: October 13, 2022

Due Date: October 23, 2022 @ 23:59

1. What will be the output of the following Java program? (1 mark) 1. class output 2. { 3. public static void main(String args[]) 4. { 5. StringBuffer s1 = new StringBuffer("Regina"); 6. StringBuffer s2 = s1.reverse(); 7. System.out.println(s2); 8. } 9. }

b) anigeR

2. Which one of the following is not an access modifier? (1 mark)

b) Void

3. Which of the following is a valid declaration of an object of class Uofr? (1 mark)

d) Uofr obj = new Uofr();

4. Which of the following statements is correct? (1 mark)

c) Public method is accessible to all other classes in the hierarchy

5. Which of these methods of class String is used to compare two String objects for their equality? (1 mark)

a) equals()

6. Which data type value is returned by equals() and matches() method of the String class? (1 mark)

c) boolean

7. Where is an array stored in memory? (1 mark)

c) heap space

8. What is false about constructor? (1 mark)

a) Constructor can have a return type

9. Abstract class can have a constructor. (1 mark)

a) True

10. What behaviour would be if the constructor has a return type? (1 mark)

a) Compilation error

SECTION B – 90 marks

Section B is in separate files.

1. Write a java program to implement a queue as a class abstraction (30 marks).
2. Write a program that using class abstraction that take a list of 10 integers and a key (an integer) from a user, The program goes ahead to return the location of the key using binary search (20marks).
3. Using Class abstraction develop the Tic Tac Toe Game in Java (40 marks).