Endsem Examination

CSE201

[10x3=30 Marks]

90 mins

Q1: Convert the code in Main.java such that it does the same job but by implementing the Runnable interface.

Q2: In the code given in Main2.java, there are two class doing the same job. Convert this code such that it outputs the same but using a generic class

Q3: The code given in Main3.java throws a null pointer exception.
The classes A,B & C cannot be changed. Please handle this exception using a try-catch block in the main function itself such that there is no null pointer exception and the program outputs the desired result, i.e. 5.

Q4: In Main4.java, currently, there is a composition relationship between A4 & B4. Modify this code in such a way that there is an association relationship between them and the program still prints 5.

Q5: There is a null pointer exception in the code given in Main5.java.
By adding appropriate initialization blocks, ensure that the null pointer exception is taken care of.

Q6: In Main6.java, modify A6 such that it implements the Comparable Interface. And compare a with b in terms of i-value in the main function.

Q7: The current code in Main7.java prints the address of the complex number c. Add a function to the complex class to ensure that printing of c results in printing of the actual complex number, i.e. 5.5+7.5i.

Q8: In Main 8.java, convert the following cmplx class into a singleton class. You should be able to pass the values of real and imaginary components from the main function.

Q9: In Main 9.java, create the list of 5 complex numbers (class=cmplx2) and print them all using an iterator in the main function.

Q10: In Main10.java, using "assert", test if the code is running as expected. The code was expected to implement (a+b)^2 formula. In case something went wrong in the formula, your code should print the message "The formula is wrong.