Gedächtnisprotokoll Programmierung 1 WS 19/20 (Elements of Computer Science – Programming)

Beforehand two advices: 1) Get used to an IDE like Eclipse or IntelliJ, it saves a ton of time and 2) use your IDE for exercise 1) and 2) if you are not sure about the result

The exam was quite similar to the recent exams

1) Calculation of data types (7 in total). Result + short explanation what happens e.g.:
   a) 2.0 / 4
   b) !(5 < 6)
   c) 41.0f / 12.0d
   d) 5.0 / (5 / 2)

2) You should give the result or explain why the program would throw an error (7 in total), e.g.:
   a) Int a = 5
   b) int a = (Int 3)
   c) double d = 5 / 2
   d) boolean b = True#

3) you get some code, explain it and change a while loop to a for loop, select case to if or vice versa

4) static Boolean g(String[] stringArray) which is true if there exists at least one String at least three times

5) Recursion with a string
   Something like: write a method g(String s, int i) such that
   - 3*g(t) if the character at position n of s is 'X'
   - 2 + g(t) if n is bigger than the amount of positions in s
   - s.length() else

6) Not 100% sure about this. But something like: Write a static Boolean g(String s, String t1, String t2) which is true if s is in the form of t1+t2+t2 such like:
   g("abcdcd", "ab", "cd") is true and g("ababcd", "ab", "cd") is false. Think of empty string

7) Was about a Web Shop. It had a ListArray filled with products. A product was a class with product name, article number and price. And then you had to write two functions. As far as I remember, one was to compare all products with a specific name.

I cannot recall the last three exercises, but one was about interfaces. So basically it was quite similar to the German exam 'Programmierung 1' which is also provided by Fachschaftsrat Informatik.