

**Exam was in total 115 ; 15 is bonus.**

**(7 pts) Q1)** It was about Data types.

<u>Example</u>	<u>Type</u>	<u>Explanation</u>
31+42		
42.0/10+ 5/4		
3.2d+4.3f		
!(5>6)		
True		

**(6 pts) Q2)** It was about again data types and assignment of these data types and if the compiler works or not

e.g.

<u>Example</u>	<u>If the compiler works or not, if not the reason</u>
double r=(int)4;	

**Q3)**

- a) Read the given code and explain what it is doing

```
public static boolean f(int[] data){
    if(data==null) return false;
    int i=0;
    while(i<data.length){
        if(data[i-1]>data[i]) return false;
        i++;
    }
    return true;
}
```

- b) Implement the above code without using while or do while.

**Q4)** You must write a method which return "abc" if "abcabcXY", "XY" (it is an example) like  
string t + t + s return t

```
public static String method(String first, String s){
    }
}
```

If String first in the form t+t+s and the methods should return t else null

e.g

"xyzxyzABC" must return "xyz"

"xyxyABC" must return "xy"

"11111111" must return "111"

"xyzxyyABC" must return null;

**Q5)** Writing method which return true if a char repeated three or more in an array ( ex return true for array={1 1 1 2 3})

```
public boolean charRepeated(String[] data){  
}
```

Examples were like

{"1", "2", "3", "4", "5", "5" } must return false

{"1", "1", "1", "2", "3", "5" } must return true

**Q6)** Arrays

**Q7)** String and StringTokenizer

You are given Strings in the form of (.....;.....;.....;.....)

(String ;String ; String ;String)

↓

This part must be converted from String to int  
In the question it says that use Integer.parseInt()

Eg. (1234;Marcus Halle; Bla Bla Publishing; Something More)

You need to printout;

ISBN : ..... (integer)

Author: ..... (String)

Publisher: .....(String)

Some other thing: ..... (String)

**(15 pts)Q8)** Interface

**(15 pts)Q9)** Collections

**(15 pts)Q10)** Queue

You have implement a method into Queue.java that add new element to the desired position

```
Public void addElem(Elem new, int pos){  
}
```