Section B - question list (for those who want to revisit)

I was asked by a student if I would be willing/able to make the Section B questions from the test available, particularly the last question so students who wanted to could have another go at them in their own time, for their own understanding.

> "Q6 in particular - I don't want to let it beat me! 🙂"

These will of course be available once marking is completed and feedback is available, but in the meantime probably no big issue in putting the question list up a bit earlier for students to have a go at. I'm also putting up a Programming Challenge related to Q6, so probably helpful to see the original question as a refresher.

So Questions below:

Question 1

Write a method (only) that will accept two double values and return the largest value. (assume the numbers are always different values).

Provide the method (only)

Question 2

Write a method that will contain a **While** loop that will start a countdown from 10 (inclusive) and end at 1 (inclusive) but interrupt the loop so that it stops as the counter reaches 5. Such that the output will be ...

10
9
8
7
6
Abort

Provide the method (only)

Question 3

Complete the following code snippet - (assume the user will always enter a positive number so no error checking required here)

```
public static void main(String[] args) {
    int number;
    // TODO
    // 1. Prompt the user for a positive number. (assume the user will always enter a positiv
e number)
    // 2. Read in the number
    // 3. Output ZERO TAIL or NON-ZERO TAIL (as determined by the last digit of the input num
ber) - eg. 250 gives ZERO TAIL, 99 gives NON-ZERO TAIL

}
```

Provide the complete class

Question 4

Complete the code as per the TODO comments

```
public static void main(String[] args) {

                int[] myArray = {4,9,2,13,7};
                // TODO : output the elements of the array (on one line) (note a loop must be
used for this)

                // TODO : update each element in the array by 5. e.g. the first element (init
ialed as 2) is updated to 7

                // TODO : output to screen the POSITION of the smallest value in the array

}
```

Provide the complete class

Question 5

Rewrite the following code snippet using the **conditional / ternary operator** to replace the following **if .. else** statement to achieve the same functionality.

```
char response = 'y';
if (response == 'y') {
    System.out.println("You Chose Yes");
} else {
    System.out.println("OK Goodbye");
}
```

Provide the snippet (only)

Question 6

Complete the following code to achieve the functionality as per the TODO comments :

Paste the full contents of your Class file as your answer.

```
     String name;
     name= "QUB Computer Science";   //assume name will only ever contain Letters/Spaces (no
 punctuation etc)
                                     //You can also assume it will start and end with letters
(no trailing whitespace etc)
```

```
     // TODO : change name to upper case and output to screen.

     // TODO : write a method which will count and return the number of occurrences of a give
n character in a String. Use it to output the number of spaces in name to the screen.

     // TODO : output to screen the total number of words in the input String name i.e. 3 for
"QUB Computer Science".

     // TODO : replace QUB in name with QUEENS UNIVERSITY BELFAST and output the String to sc
reen.

     // TODO : output the total number of vowels in name to the screen (a, e, i, o, u) - both
upper and lowercase occurrences should be counted.

     // TODO : output a sorted version of the sentence in ascending order by character to scr
een.
     // Note space characters will normally be sorted in ascending order before Alphabetic ch
aracters.
```

Provide the complete class