Algorithms & Data Structures (M)

Assessed Exercise (2019–2020)

This exercise is assessed. Its weighting is *0.3* in the ADS(M) course assessment.

The deadline is *Monday 16 March 2020* at 16:30.

1.

This part of the exercise is to show that you understand the Java interface `Set` and it's implementation, `TreeSet`. See Lecture 1 for an example of these classes use.

You have been provided with three files: a text file `birds.txt`, an outline of a class, `AssEx1_outline.java`, and a pdf file `exampleOutput.pdf`. You should make a copy of `AssEx1_outline.java` and rename it `AssEx1.java`.

Complete the `AssEx1.java` class as instructed in the comments within the file. Do **not** change the `main` method in any way or include any package declaration. You should include any import statements necessary for me to run the program from the command line thus:

```
> javac AssEx1_outline.java
> java AssEx1 "birds.txt"
```

You may add helper methods if you need to, but any unnecessary complexity (of code) will be penalised.

When you are happy with your class, run it and store the output in a pdf document called `AssEx1_output.pdf` (remove any print statements you may have added to your methods for testing purposes first). You should inlcude your name and matriculation number at the top of this document.

The file `exampleOutput.pdf` which I generated using a different (smaller) input text file will illustrate the exact form of the output required. You can use whichever font you like.

This part of the exercise can be completed now, but you will submit it at the same time as your submission for part 2. Full submission instructions will be included at the end of this document, but for this part of the exercise you will submit your two files: AssEx1

2. Will be added later.