Tasks for Question 2: 25 marks

Submission: You must include the `bash` script in your `tar.gz` file for submission. More files can be included, but these are the minimum.

Your task is create a `bash` shell script that removes comments and blank lines from another shell script, leaving only the commands.

- You are provided and example shell script `samplebash.sh`
- Remember comments start with a `#`) and can be at the start of a line or the `#` can be on a line after a command.
- Assume that if a `#` is used ***in*** a command (an `echo` or `if` statement for example) that there will be no comment also on that line. See the example `samplebash.sh` for clarification.
- Assume that the *shebang* (`#!/bin/bash`) is the first line of the script and never contains a comment.

Your tasks for this assignment:

1. Write a `bash` script called `userid_q2.sh` where `userid` is your student ID. The script takes two arguments, an input file (e.g. `samplebash.sh` and an output file.
    - Verify that two arguments are provided to the script, otherwise exit (2 marks)
    - Verify that the input file exists and can be read by the script, otherwise exit (2 marks).
    - If the output file *aleady exists, and is writable by the user*, the script should ask the user if it is OK to overwrite the output file. The user can respond with `y`, `Y`, `n`, `N`. If any other response is given, the script should ask again until a valid response is received. (6 marks)
    - As part of the previous requirement, you should use a `case` statement. (2 marks for using `case`)
    - The script should remove all comments from the input script and write the script without comments to the output file. The script should not affect commands that contain the `#`. (8 marks)

- The script should remove all blank lines from the input script. (2 marks)
- The script should make the resulting output script executable by the owner. (1 mark)

2. Your script should contain comments which explain the code for the reader. (2 marks)

Notes:

- An example output from a sample solution is included. However, your status messages may be customized yourself
- Commands used in the script must be standard Linux utilities as described in the course.

END OF QUESTION 2