# Practical Skills Assessment 2 – Test Plan

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Test Number 1:  
Test Case: The program shall enable the display of a full list of student id numbers and module marks to the user.

Expected Outcome: Should display a list of Students ‘B’ numbers and their corresponding marks. List should display in this format: B00111,99.

Actual Outcome: Printed as expected.

Pass/Fail: Pass

Further Notes: N/A

Test Number 2:  
Test Case: The program shall allow the user to enter a new record in the marks file, prompting the user to enter a student id and module mark.

Expected Outcome: The program should ask for the details of the new record to be added, by taking an input from the user and then write them to the “marksFile”.

Actual Outcome: As expected, completes the task above and confirms the record has been added through the output console.

Pass/Fail (was the actual outcome as expected?)

Further Notes: N/A

Test Number 3:  
Test Case: Student id number should be exactly six characters in length. Module mark should be a whole number in the range 0-100. The program should confirm to the user when a mark has been successfully entered.

Expected Outcome: The user input should be formatted to have restrictions that were stated above.

Actual Outcome: Users input was not restricted in regards to character input/length and number range.

Pass/Fail: Fail

Further Notes: N/A

Test Number 4:  
Test Case: The program shall allow the user to edit an existing mark. The program should confirm to the user when a mark has been successfully updated.

Expected Outcome: The program will take the student ‘B’ number by user input, then search the file to find a matching record. It should then replace the old record with the new record that the user will be prompted to input.

Actual Outcome: As expected, finds and replaces the existing file.

Pass/Fail: Pass

Further Notes: We are aware that in this method we should have only displayed the ‘B’ number and old mark and showed the changes made. However, we were not able to achieve this. We settled on displaying the full list, so we could at least demonstrate it worked to an extent. We are also aware this wouldn’t be viable for a system holding one hundred plus records, having all those records display in the output console would make it too difficult to confirm that the mark has been changed by simply comparing the two lists.

We have also realised through testing we do not know to supply the user with a message when an non-existent ‘B’ code is entered.

Test Number 5:  
Test Case: The program shall allow a user to delete an existing mark. This will lead to the deletion of the full record of student id and mark. The program should confirm to the user when a mark entry has been successfully deleted.

Expected Outcome: The program should take the users input and then search the file to find a matching record. It should then delete this record and append to the file.

Actual Outcome: As expected, deletes record.

Pass/Fail: Pass

Further Notes: Further Notes: We are aware that in this method we should have only displayed the deleted ‘B’ number and mark and showed the changes made. However, we were not able to achieve this. We settled on displaying the full list, so we could at least demonstrate it worked to an extent. We are also aware this wouldn’t be viable for a system holding one hundred plus records, having all those records display in the output console would make it too difficult to confirm that the mark has been changed by simply comparing the two lists.

We have also realised through testing that we do not know how to supply the user with a message when a non-existent ‘B’ code is entered.

Test Number 6:  
Test Case: The program shall also enable the user to generate simple statistics for the module, such as number of students in the file, average mark, maximum mark and minimum mark.

Expected Outcome: The program should allow the user to calculated the count the number of students within file as well as the average, minimum and maximum marks within the file. The program should print the calculation results to the output console.

Actual Outcome: As expected, each menu choice output the correct calculation.

Pass/Fail: Pass

Further Notes: Each of these options are a different choice within the menu.

Test Number 7:  
Test Case: The program shall allow the user to save all edits from the current session to file in CSV format as above.

Expected Outcome: The program should update the file throughout the use of the program, so that the “marksFile” always has the up-to-date data.

Actual Outcome: All updates, edits and deletions are automatically saved to the file.

Pass/Fail: Pass

Further Notes: N/A