|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable Name | Test Type | Test Data | Purpose of Data | | Pass | Fail |
| option | integer | 1 | Allow the program to store and execute the user option from the menu to add a class | | Pass |  |
| cName | String | ? | To allow program to store the name of the form teacher class | | Pass |  |
| tName | String | user | To allow program to store the name of the class teacher | | Pass |  |
| tPass | String | pass | To grant the user full access to the program | | Pass |  |
| Program is ran again | | | | | | |
| tName | String | user | To allow program to store the name of the class teacher | | Pass |  |
| tPass | String | pass | To grant the user full access to the program | | Pass |  |
| readUsername | String | users@3 | To ensure the right username is enter to allow the user access | | Pass |  |
| readPassword | String | Password112 | To ensure the right password is enter to allow the user access | | Pass |  |
| Program ran again | | | | | | |
| tName | String | user | To allow program to store the name of the class teacher | | Pass |  |
| tPass | String | pass | To grant the user full access to the program | | Pass |  |
| readUsername | String | user | To ensure the right username is enter to allow the user access | | Pass |  |
| readPassword | String | pass | To ensure the right password is enter to allow the user access | | Pass |  |
| size | integer | 3 | Prompr user to state how many student he/she would like to enter | | Pass |  |
| Students[i].fullName | String | Jan | Allow the program to store all students full name to a file | | Pass |  |
| Students[i].mathGrade | *String* | *100* | Allow the program to store all math students grades to a file | | Pass |  |
| Students[i].engGrade | String | *29* | Allow the program to store all English students grades name to a file | | Pass |  |
| Students[i].phyEdGrade | String | *42* | Allow the program to store all Physical Education students grades to a file | | Pass |  |
| Students[i].inteSciGrade | String | *39* | Allow the program to store all Integrated Science Students grades to a file | | Pass |  |
| x | integer | 2 | Allow the program to count the number of students for each iteration | | Pass |  |
| Students[i].fullName | String | Wan | Allow the program to store all students full name to a file | | Pass |  |
| Students[i].mathGrade | *String* | 23 | Allow the program to store all math students grades to a file | | Pass |  |
| Students[i].engGrade | String | 49 | Allow the program to store all English students grades name to a file | | Pass |  |
| Students[i].phyEdGrade | String | 11 | Allow the program to store all Physical Education students grades to a file | | Pass |  |
| Students[i].inteSciGrade | String | 29 | Allow the program to store all Integrated Science Students grades to a file | | Pass |  |
| x | integer | 3 | Allow the program to count the number of students for each iteration | | Pass |  |
| Students[i].fullName | String | Han | Allow the program to store all students full name to a file | | Pass |  |
| Students[i].mathGrade | *String* | 83 | Allow the program to store all math students grades to a file | | Pass |  |
| Students[i].engGrade | String | 34 | Allow the program to store all English students grades name to a file | | Pass |  |
| Students[i].phyEdGrade | String | 98 | Allow the program to store all Physical Education students grades to a file | | Pass |  |
| Students[i].inteSciGrade | String | 73 | Allow the program to store all Integrated Science Students grades to a file | | Pass |  |
| Program ran again | | | | | | |
| option | integer | 4 | Allow the program to store and execute the user option from the menu to manage a class | | Pass |  |
| option | integer | 1 | Allow the program to store and execute the user option from the menu to add a student under class management | | Pass |  |
| tUsername | String | user | To allow program to store the name of the class teacher | | Pass |  |
| tPassword | String | pass | To grant the user full access to the program | | Pass |  |
| className | String |  | To allow program to store the name of the form teacher class | | Pass |  |
| Student[i].fullName |  | Pan | Allow program store full name of a student | | Pass |  |
| Student[i].mathGrade |  | 45 | Allow the program to store the math grade of a student | | Pass |  |
| Student[i].engGrade |  | 67 | Allow the program to store the English grade of a student | | Pass |  |
| Student[i].inteSciGrade |  | 87 | Allow the program to store the Integrated Science grade of the student | | Pass |  |
| Student[i].phyEdGrade |  | 32 | Allow the program to store the physical education grade of a student | | Pass |  |
| Program ran again | | | | | | |
| option | integer | 4 | Allow the program to store and execute the user option from the menu to manage a class | | Pass |  |
| option | integer | 2 | Allow the program to store and execute the user option from the menu to remove a student under class management | | Pass |  |
| className | String |  | To allow program to store the name of the form teacher class | | Pass |  |
| tUsername | String | user | To allow program to store the name of the class teacher | | Pass |  |
| tPassword | String | pass | To grant the user full access to the program | | Pass |  |
| studentName | String | Pan | Allow program find full name of a student | | Pass |  |
| islogged |  |  | Used to check if the password given match those within the file | | Pass |  |
| Student[i].fullName | String | Pan | Allow program store full name of a student | | Pass |  |
| Student[i].mathGrade | Integer | 45 | Allow the program to store the math grade of a student | | Pass |  |
| Student[i].engGrade | Interger | 67 | Allow the program to store the English grade of a student | | Pass |  |
| Student[i].inteSciGrade | Integer | 87 | Allow the program to store the Integrated Science grade of the student | | Pass |  |
| Student[i].phyEdGrade | Integer | 32 | Allow the program to store the physical education grade of a student | | Pass |  |
| Program ran again | | | | | | |
| option | integer | 3 | | Allow the program to store and execute the user option from the menu to view a class report | Pass |  |
| tUsername | String |  | | To allow program to store the name of the class teacher | Pass |  |
| tPassword | String | pass | | To grant the user full access to the program | Pass |  |
| className | String |  | | To allow program to store the name of the form teacher class | Pass |  |
| islogged |  | User/ pass | | Ensure the login information is correct. | pass |  |
| readUsername | String | user | | To ensure the right username is enter to allow the user access | Pass |  |
| readPassword | String | pass | | To ensure the right password is enter to allow the user access | Pass |  |
| heighestAverage | Integer | 52>0 | | To determine the highest average of the students | Pass |  |
| highestAverageStudent | String | Jan | | To determine the name of the highest average student | Pass |  |
| heighestAverage | Integer | 52>0 | | To determine the highest average of the students | Pass |  |
| highestAverageStudent | String | Jan | | To determine the name of the highest average student | Pass |  |
| heighestAverage | Integer | 52>0 | | To determine the highest average of the students | Pass |  |
| highestAverageStudent | String | Jan | | To determine the name of the highest average student | Pass |  |
| heighestMath | Integer | student[].math Grade 23>0 | | To the determine the highest math average | Pass |  |
| heighestMathStudent | String | Wan | | To determine the name of  The student with the highest Math average | Pass |  |
| heighestMath | Integer | student[].math Grade 83>23 | | To the determine the highest math average | Pass |  |
| heighestMathStudent | String | Han | | To determine the name of  The student with the highest Math average | Pass |  |
| heighestMath | Integer | student[].math Grade 100>83 | | To the determine the highest math average | Pass |  |
| heighestMathStudent | String | Jan | | To determine the name of  The student with the highest Math average | Pass |  |
| heighestEng | integer | student[].eng Grade 29>0 | | To the determine the highest English average | Pass |  |
| highestEngStudent | String | Jan | | To determine the name of  The student with the highest English average | Pass |  |
| heighestEng | integer | student[].eng Grade 34>29 | | To the determine the highest English average | Pass |  |
| highestEngStudent | String | Han | | To determine the name of  The student with the highest English average | Pass |  |
| heighestEng | integer | student[].eng Grade 49>34 | | To the determine the highest English average | Pass |  |
| highestEngStudent | String | Wan | | To determine the name of  The student with the highest English average | Pass |  |
| heighestPhyEd | Integer | student[].phyEd Grade 11>0 | | To the determine the highest physical education average | Pass |  |
| heighestPhysEdStudent | String | Wan | | To determine the name of  the student with the highest Integrated Science average | Pass |  |
| heighestPhyEd | Integer | student[].phyEd Grade 39>11 | | To the determine the highest physical education average | Pass |  |
| heighestPhysEdStudent | String | Jan | | To determine the name of  the student with the highest Integrated Science average | Pass |  |
| heighestPhyEd | Integer | student[].phyEd Grade 98>39 | | To the determine the highest physical education average | Pass |  |
| heighestPhysEdStudent | String | Han | | To determine the name of  the student with the highest Integrated Science average | Pass |  |
| heighestInteSci | integer | student[].inteSci Grade 29>0 | | To the determine the highest Integrated Science average | Pass |  |
| heighestInteSciStudent | String | Wan | | To determine the name of  The student with the highest Integrated Science average | Pass |  |
| heighestInteSci | integer | student[].inteSci Grade 42>29 | | To the determine the highest Integrated Science average | Pass |  |
| heighestInteSciStudent | String | Jan | | To determine the name of  The student with the highest Integrated Science average | Pass |  |
| heighestInteSci | integer | student[].inteSci Grade 73>42 | | To the determine the highest Integrated Science average | Pass |  |
| heighestInteSciStudent | String | Han | | To determine the name of  the student with the highest Integrated Science average | Pass |  |
| i |  |  | |  |  |  |
| j |  |  | |  |  |  |
| averageGrade | Integer |  | |  |  |  |
| Program ran again | | | | | | |
| option | integer | 2 | | Allow the program to store and execute the user option from the menu to remove a class | Pass |  |
| className | String |  | | To allow program to store the name of the form teacher class to confirm the existence of a file for that class | Pass |  |
| Program ran again | | | | | | |
| option | integer | 2 | | Allow the program to store and execute the user option from the menu to remove a class | Pass |  |
| className | String |  | | To allow program to store the name of the form teacher class to confirm the existence of a file for that class | Pass |  |
| tUsername | String | user@3 | | To allow program to store the name of the class teacher | Pass |  |
| tPassword | String | Pass1123 | | To grant the user full access to the program | Pass |  |
| readUsername | String | user | | To ensure the right username is enter to allow the user access to the class file | Pass |  |
| readPassword | String | pass | | To ensure the right password is enter to allow the user access to the class file | Pass |  |
| Program ran again | | | | | | |
| option | integer | 2 | | Allow the program to store and execute the user option from the menu to remove a class | Pass |  |
| className | String |  | | To allow program to store the name of the form teacher class to confirm the existence of a file for that class | Pass |  |
| tUsername | String | user | | To allow program to store the name of the class teacher | Pass |  |
| tPassword | String | pass | | To grant the user full access to the program | Pass |  |
| readUsername | String | user | | To ensure the right username is enter to allow the user access to the class file | Pass |  |
| readPassword | String | pass | | To ensure the right password is enter to allow the user access to the class file | Pass |  |
| Program ran again | | | | | | |