

Project

Write a program that first print the student's marks data given in the attached excel file then show the horizontal bar chart of the grades frequency which student achieved and in the last tell us which grade category got maximum and minimum number of students.

Your program should display according to the following samples output.

Sample 1

```
C:\Users\OWNER\Documents\C++ programs\Assignments\Project_Math206F21.exe
120 Students marks data of subject Math206
60 55 61 56 68 84 73 52 63 50 68 65 87 80 67 83 53 63 85 84 76 72 61 85 52 77 73 81 63 77
81 60 70 87 69 61 72 62 78 64 67 75 86 61 81 77 86 49 62 74 59 57 76 72 71 74 49 61 66 57
71 80 64 87 51 60 68 50 77 70 69 81 82 79 60 66 78 52 52 58 68 86 76 60 59 82 84 73 58 51
81 71 85 50 71 59 81 55 65 63 81 75 56 60 53 74 70 54 53 67 84 70 49 50 80 66 63 79 62 69

A+      0
A  *****  9
B+ ***** 17
B  ***** 13
B- ***** 17
C+ ***** 15
C  ***** 21
D  ***** 11
F  ***** 14

21 students got the grade C.
0 students got the grade A+.
-----
```

Sample 2

```
C:\Users\OWNER\Documents\C++ programs\Assignments\Project_Math206F21.exe
120 Students marks data of subject Math206
76 82 59 77 53 81 53 71 62 80 68 67 83 62 65 86 49 86 55 74 71 75 62 72 80 48 51 86 74 57
64 52 58 58 61 54 61 52 83 51 85 63 49 61 77 79 69 75 83 50 60 49 55 76 76 83 71 50 84 80
48 74 81 86 50 66 71 75 76 74 77 62 71 52 50 87 59 71 86 55 55 61 85 63 58 54 63 62 53 65
51 72 48 70 79 57 65 70 50 67 73 56 81 86 81 68 59 77 57 86 72 72 54 51 58 82 84 75 77 57

A+      0
A  ***** 10
B+ ***** 15
B  ***** 15
B- ***** 17
C+ *****  9
C  ***** 14
D  ***** 16
F  ***** 18

18 students got the grade F.
0 students got the grade A+.
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```

Grading criteria should be according to the following table.

| Serial # | Marks Range | Awarded Grade |
|----------|-------------|---------------|
| 1 | ≥ 85 | A+ |
| 2 | 80-84 | A |
| 3 | 75-79 | B+ |
| 4 | 70-74 | B |
| 5 | 65-69 | B- |
| 6 | 60-64 | C+ |
| 7 | 55-59 | C |
| 8 | 50-54 | D |
| 9 | ≤ 49 | F |

Instructions: -

1. You can only use those commands which you will learn till the submission dead line.
2. Use of commands other than defined in clause 1 are strictly prohibited.
3. Your program should be well formatted.
4. Your program code must be optimized (one with least possible number of code lines).
5. Your output format should be strictly according to the sample outputs.
6. your program must be capable of displaying the required outputs for any 120 student's marks data given in the file.