You are provided with a template for the solution, grader.c. You **should not rename that file or edit the print statements that are already included.**

Your program will **accept one command line argument** – the name of the text file containing studentgrades. The text data file provided, grades.txt, contains records for 32 students with 4 grades for eachstudent. Each line is one record: student_id grade_1 grade_2 grade_3 grade_4

· student_id is an integer in the range 2022000 to 2022099.
· An id with any other value is an error. Your program should print the appropriate error message and exit immediately.
· grade_i is an integer in the range 0 to 100.
· A grade with any other value is an error. Your program should print the appropriate error message and exit immediately.

Your code will import the student data and compute an average grade over all 4 modules for eachstudent, with the following constraints:
· Any grade less than 20 should be corrected to 20 before averaging.
· Any grade greater than 90 should be corrected to 90 before averaging.
· The final average recorded should be rounded to the nearest integer.Rounding of the raw grade is defined by: (grade < g+0.5) = g, (grade >= g+0.5) = g+1

The program output must be a separate file ‘averages.txt’ which contains records for all 32 students.
· Each line is one record: student_id grade_average
· There is one blank space between the data values, and no other white space in the file
· student_id is in the same order as the input file
· grade_average is an integer

The output from this program onto the command line should be as following:

Input file. Opening.
Input file. Closing.
Checking data.
Computing averages.
Output file. Opening.
Output file. Closing.

The print statements are already in the file and do not need any alteration and no new print statements are required.

The outcome of what the file should be is as following:

2022020 62
2022017 68
2022015 67
2022018 58
2022010 57
2022001 54
2022008 65
2022003 47
2022022 70
2022000 63
2022007 75
2022026 63
2022016 64
2022029 54
2022006 61
2022002 65
2022023 64
2022014 64
2022021 46
2022024 58
2022027 61
2022028 77
2022013 59
2022012 75
2022019 77
2022005 59
2022004 59
2022030 66
2022025 62
2022011 62
2022009 67
2022031 51