gcc program.c # Compiles program.c and generates a default executable named a.out ./a.out # Runs the compiled program

gcc program.c -o my_program # Compiles program.c and creates an executable named my_program ./my_program # Runs the compiled program

gcc program.c -o input_program # it takes inputs from input1.txt and displays the result in the terminal.
./input_program < input.txt</pre>

gcc program.c -o io_program

./io_program < input.txt > output.txt

it takes the inputs from input1.txt and creates the myoutput.txt document and writes the result here.

diff output1.txt myoutput.txt # compares the document output1.txt with the document myoutput.txt.

diff --ignore-all-space output1.txt myoutput.txt

compares the document output1.txt with the document myoutput.txt without ignoring the spaces.

QUESTION 1

A publishing house tracks the books written by 3 authors. For each author, the following information will be provided:

- Author name (up to 30 characters)
- Number of books written (int)
- Total number of pages written (int)

You need to define a structure called Author to store this information. Then, input the details for 3 authors. Next, for each author, calculate the average number of pages per book. Finally, find the most efficient author (the one with the highest average pages per book) and display their information.

Input1:

1. Author Information

Author name: Ali

Number of books written: 5

Total number of pages written: 500

2. Author Information

Author name: Ayşe

Number of books written: 2

Total number of pages written: 1000

3. Author Information

Author name: Mehmet
Number of books written: 4

Total number of pages written: 600

Output1:

Average Book Lengths of Authors

Author: Ali

Average book length: 100

Author: Ayşe

Average book length: 500

Author: Mehmet

Average book length: 150

Most Efficient Author: Ayşe (Average: 500)