Variables, Operations, and Loops

Write a C program that generates multiplication tables using different loop structures.

TASK REQUIREMENTS:

- Generate a printed N×N table for values N=1 to 9 using for loops
- Table should have column headers showing each N value
- Create a reversed version(9 at top/left) using while loops
- Include clear code comments and consistent formatting
- Preserve the included sample text files for testing

SAMPLE OUTPUT

```
path\to\your\file\ASSIGN1.exe


TABLE OF PRODUCTS(FOR LOOP)
N     1     2     3     4     5     6     7     8     9
1     1     2     3     4     5     6     7     8     9
2     2     4     6     8     10    12    14    16    18
3     3     6     9     12    15    18    21    24    27
4     4     8     12    16    20    24    28    32    36
5     5     10    15    20    25    30    35    40    45
6     6     12    18    24    30    36    42    48    54
7     7     14    21    28    35    42    49    56    63
8     8     16    24    32    40    48    56    64    72
9     9     18    27    36    45    54    63    72    81



REVERSED TABLE OF PRODUCTS(WHILE LOOP)
N     9     8     7     6     5     4     3     2     1
9     81    72    63    54    45    36    27    18    9
8     72    64    56    48    40    32    24    16    8
7     63    56    49    42    35    28    21    14    7
6     54    48    42    36    30    24    18    12    6
5     45    40    35    30    25    20    15    10    5
4     36    32    28    24    20    16    12    8     4
3     27    24    21    18    15    12    9     6     3
2     18    16    14    12    10    8     6     4     2
1     9     8     7     6     5     4     3     2     1



Process finished with exit code 0
```

Submission Instructions

Video Recording Submission:

You will demonstrate the completion of this project via a **video screen-capture recording** of you using

CLion, GitBash, and viewing your code to show completion of the **Video Submission Checklist**, which is posted on Brightspace. You will post **either your video file or a link to it**(e.g. a Microsoft Stream recording, make sure to give the instructor permissions to watch it), to the Brightspace Assignment 1 Dropbox prior to the deadline. If you are not sure of how best to capture such a video, seek advice from the instructor prior to the deadline.

NOTE: MAKE SURE TO SHOW EVERYTHING IN THE VIDEO SUBMISSION CHECKLIST STEP-BY-STEP. YOU WILL NEED AUDIO IN THE VIDEO FOR AT LEAST THE CODE REVIEW PORTION OF THE CHECKLIST