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 11 using for loops
- Table should have column headers showing each N value
- Create a reversed version(11 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     10    11
1    1     2     3     4     5     6     7     8     9     10    11
2    2     4     6     8     10    12    14    16    18    20    22
3    3     6     9     12    15    18    21    24    27    30    33
4    4     8     12    16    20    24    28    32    36    40    44
5    5     10    15    20    25    30    35    40    45    50    55
6    6     12    18    24    30    36    42    48    54    60    66
7    7     14    21    28    35    42    49    56    63    70    77
8    8     16    24    32    40    48    56    64    72    80    88
9    9     18    27    36    45    54    63    72    81    90    99
10   10    20    30    40    50    60    70    80    90    100   110
11   11    22    33    44    55    66    77    88    99    110   121



REVERSED TABLE OF  PRODUCTS(WHILE LOOP)
N    11    10    9     8     7     6     5     4     3     2     1
11   121   110   99    88    77    66    55    44    33    22    11
10   110   100   90    80    70    60    50    40    30    20    10
9    99    90    81    72    63    54    45    36    27    18    9
8    88    80    72    64    56    48    40    32    24    16    8
7    77    70    63    56    49    42    35    28    21    14    7
6    66    60    54    48    42    36    30    24    18    12    6
5    55    50    45    40    35    30    25    20    15    10    5
4    44    40    36    32    28    24    20    16    12    8     4
3    33    30    27    24    21    18    15    12    9     6     3
2    22    20    18    16    14    12    10    8     6     4     2
1    11    10    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