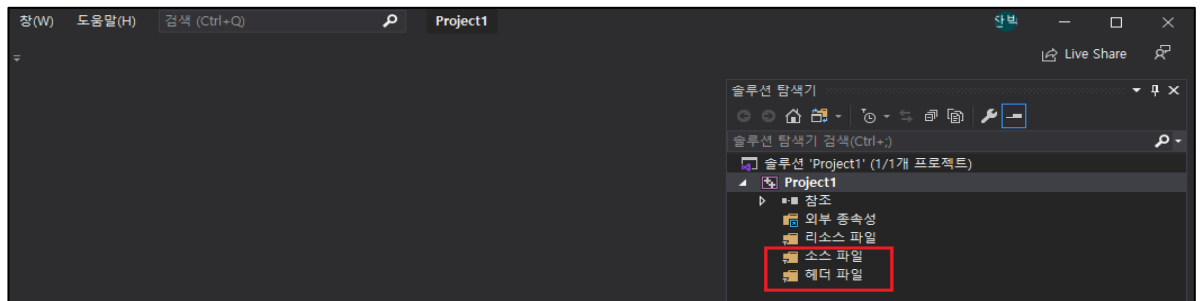# My Game : Tetris

1. Instructions to compile and play your game.

Target Operating System : Windows10 (with Visual Studio 2019)

- **How to compile ?**

Make new project file(c++) in Visual Studio(2019), move the source code "main.c & tetris.c" to "소스파일" folder and move header file "tetris.h" to "헤더파일" folder and run the code(main.c). **[Figure 1]**, **[Figure2]**

[Figure 1]

[Figure 2]

- **How to Play ?**

- Top Player's Name & Score.

- Key Instructions.

- Press 's' to start the game. (Game starts after 3 seconds)

2. The Scoring System.
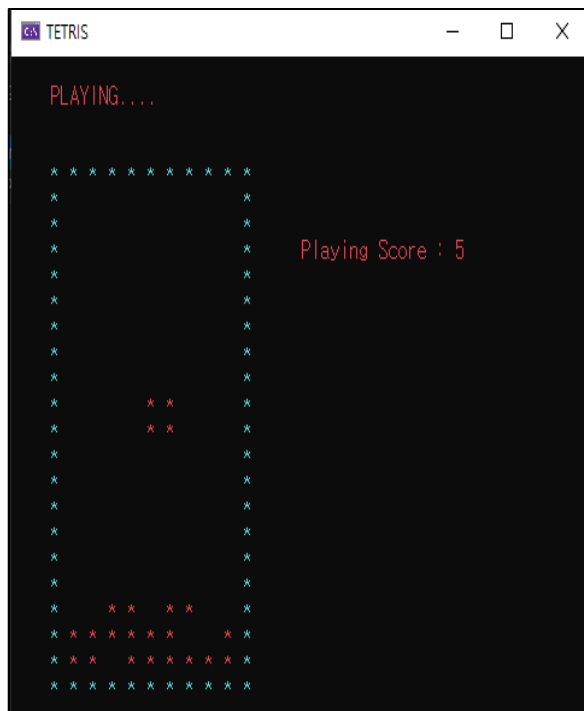
1)Basic Scoring system and descending block speed.

-If you make blocks full in just one row, then you get 5 points.

-If you make blocks full in multiple rows(should be consecutive), then you get (5 * number of rows * 2) points.

-Getting every 20 points, the descending block speed is up.

2) Chance of clearing stacked blocks. (Key Instructions : Press 'c' key)

- If you get more than 20 points, you can get the chance of clearing the stacked blocks by press 'c' key. But, your score is initialized as 0 point and the block speed is maintained.
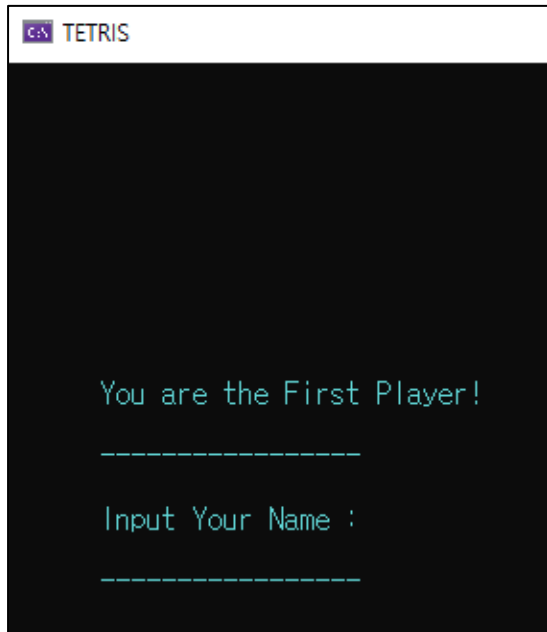
3) Renewal the record. (First Player & Not First Player)

- First Player : If player get more than 0 points, input view appears after 2 seconds and input your name(under the length of 49). **[Figure 3]**
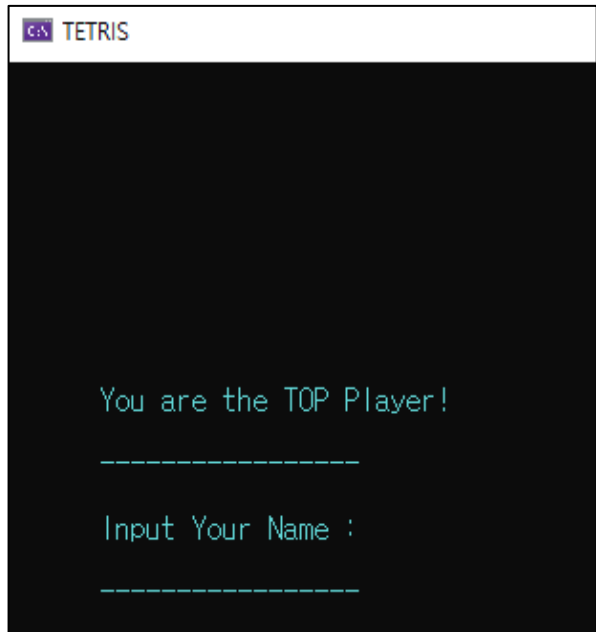
  ➔ Name & Score Updated.

- Not First Player : If player break the top player's record, input view appears after 2 seconds and input your name(under the length of 49).

  ➔ Name & Score Updated. **[Figure 4]**

[Figure 3]   [Figure 4]

3. Challenges and the Proud of my game.

1) Challenge.

At first, I implemented the code using "system('cls')" to draw the descending block, the view is blinking so much. It makes the player's eye get tired. But, I match the y-axis position of block descending using function "cursor_gotoxy()" then, the block moving and the view becomes smoothly.

2) New Scoring System and Speed level.

Basically, I implemented the game based on Tetris game but, I implemented the scoring system to encourage players to do challenge by getting double points when achieving to make blocks full in multiple lines. Also, every 20 points players get, the speed level is up.

3) User Interactive Experience.

Not only making game user interactive by make players to press arrow and space key to move blocks dynamically, but also giving the user the opportunity of clearing the stacked blocks by pressing 'c' key in exchange of score be initialized to zero and the increased speed is maintained.