# **Ping Pong Console Game**

# **Overview**

This is a simple console-based Ping Pong game developed in C++ using the Windows API. The game features two players, each controlling a paddle to bounce a ball back and forth. The first player to reach a score of 7 wins the game.

## **Features**

* Single Player Mode: Play against a second player using keyboard controls.
* Difficulty Levels: Choose from three difficulty levels—Noob, Thora Sa Moob, and Pro Level Mode—each with different ball speeds.
* Paddle Controls: Control paddles using keyboard inputs to move up and down.
* Score Display: Real-time score tracking for both players.
* Replay Option: Option to replay the game after a match ends.

## **How to Play**

### **Controls:**

* Player 1:
  + Move Up: W
  + Move Down: S
* Player 2:
  + Move Up: I
  + Move Down: K

### **Game Flow:**

1. Start the Game: Run the program, and you will be prompted to select a difficulty level.
2. Gameplay: The ball will move between the paddles. Use the controls to move your paddle up or down to prevent the ball from passing by your side.
3. Winning: The first player to reach a score of 7 wins the game. A congratulatory message will be displayed.
4. Replay: After the game ends, you can choose to play again or exit the game.

## **Code Structure**

* **main(): Initializes the game, displays the welcome message, and starts the game loop.**
* **draw\_boundaries(): Draws the playing field boundaries and initializes paddle positions.**
* **ball\_move(): Handles the movement of the ball, paddle control, collision detection, and scoring.**
* **gotoRowCol(): Moves the console cursor to a specific position for drawing elements.**
* **SetClr(): Sets the text and background color for console output.**

## **Requirements**

* **Platform: Windows**
* **Compiler: A C++ compiler that supports Windows API, such as MS Visual Studio.**
* **Libraries: iostream, Windows.h, ctime, conio.h**

## **Installation and Compilation**

1. Clone or download the source code.
2. Open the code in your preferred C++ development environment.
3. Compile and run the program.