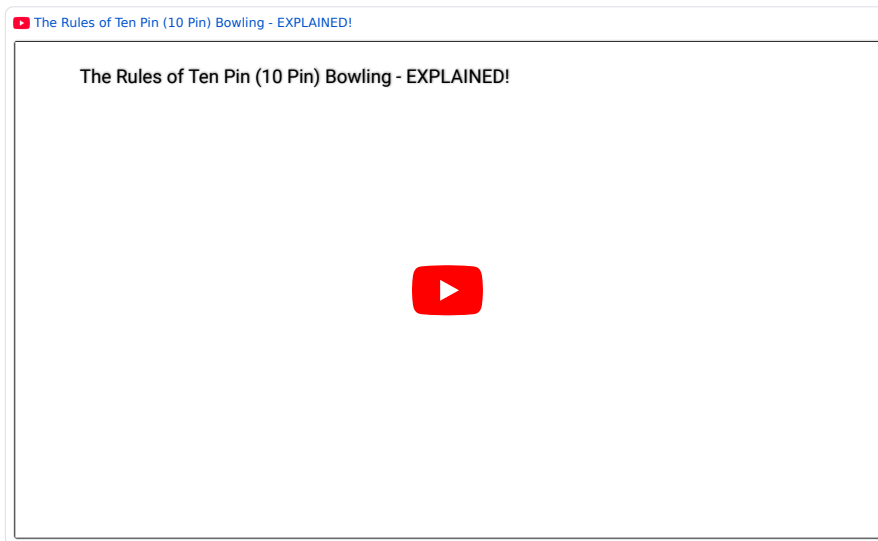


# Bowling Score Tracker

In bowling, the scoring rules are designed to reward players for knocking down pins, with additional bonuses for strikes and spares. Here are the key rules for calculating scores:

1. **Frames:** A game consists of 10 frames. In each frame, a player has up to two chances to knock down all 10 pins.
2. **Strike (X):** If a player knocks down all 10 pins with the first ball of a frame, it's a strike. The score for that frame is 10 plus the total number of pins knocked down in the next two rolls. For example, if a player rolls a strike and then knocks down 7 pins and 2 pins in the next frame, the score for the strike frame is  $10 + 7 + 2 = 19$ .
3. **Spare (/):** If a player knocks down all 10 pins with two balls in a frame, it's a spare. The score for that frame is 10 plus the number of pins knocked down in the next roll. For example, if a player rolls a spare and then knocks down 5 pins with the next ball, the score for the spare frame is  $10 + 5 = 15$ .
4. **Open Frame:** If a player does not knock down all 10 pins in a frame with two balls, the score for that frame is simply the total number of pins knocked down. For example, if a player knocks down 6 pins with the first ball and 2 pins with the second ball, the score for that frame is  $6 + 2 = 8$ .
5. **Tenth Frame:** The tenth frame is unique because if a player rolls a strike or spare, they get additional rolls. If a player rolls a strike, they get two more rolls. If they roll a spare, they get one more roll. This allows for a maximum of 12 strikes in a game, resulting in a perfect score of 300.



## User Stories

1. As a player, I want to enter my name and the names of up to 4 other players so that we can start a game.
  - **Acceptance Criteria:**
    - There should be an input field to enter the names of up to 5 players.
    - The game should not start until all player names are entered.
2. As a player, I want to enter my score for each frame so that my total score can be calculated.
  - **Acceptance Criteria:**
    - There should be input fields for each frame to enter scores.
    - The input should accept numbers and characters like **X** for strikes and **/** for spares.
3. As a player, I want the system to automatically calculate my score based on standard bowling rules so that I don't have to do it manually.
  - **Acceptance Criteria:**
    - The system should calculate the score for each frame, including bonuses for strikes and spares.
    - The total score should be updated in real-time as scores are entered.
4. As a player, I want to see a summary of scores for all players after each frame so that I can track the progress of the game.
  - **Acceptance Criteria:**
    - There should be a scoreboard displaying the scores of all players after each frame.
    - The scoreboard should highlight the current frame being played.
5. As a player, I want to see the final scores and the winner at the end of the game so that we know who won.
  - **Acceptance Criteria:**
    - The final scores for all players should be displayed at the end of the game.
    - The player with the highest score should be highlighted as the winner.

These user stories should help guide the development of a bowling score calculator that meets the specified requirements. Would you like more details on any of these stories or additional features?

## Example score sheet

Frame	Player: Hulk	Player: Hawkeye	Player: Wolverine	Player: Deadpool
1	X	7 /	8 1	• -
2	9 /	X	6 /	5 3
3	8 1	9 /	X	7 /
4	7 /	8 1	9 /	X
5	X	7 /	8 1	9 /
6	6 /	X	7 /	8 1
7	5 3	6 /	X	7 /
8	9 /	5 3	8 1	6 /
9	X	9 /	7 /	5 3
10	7 / 8	X 9 /	9 / 7	X 8 1
Total	168	170	162	153