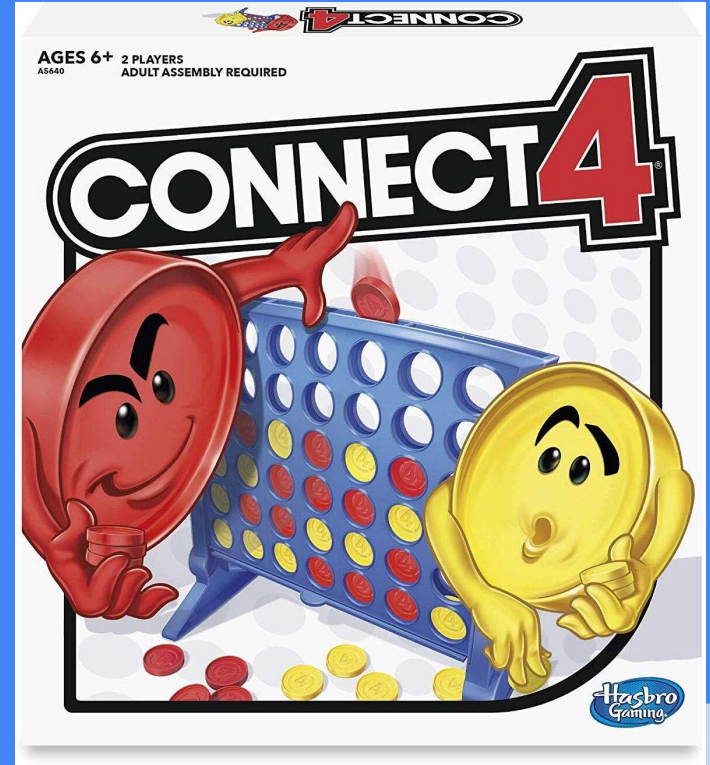# Connect 4

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Overview and Explanation

- ❏ Connect 4 is a two player connection game
- ❏ Players take turns dropping one colored disc from the top into a 7x6 grid.
- ❏ The pieces fall straight down, occupying the lowest available space within the column.
- ❏ The objective of the game is to be the first to form a horizontal, vertical, or diagonal line of four of one's own discs.
- ❏ Our code will create a board and ask for two players. These players will be asked what column to drop disc in and that space will be marked by an X or O

Functions we used

- 2D Arrays to create the game board
- Nested For Loops
- If Statements
- Boolean Variables to determine if valid move/open space

Demonstration of Code

Challenges

- **Collaboration -** Our dynamic team had diverse skill sets that we strategically streamlined for each role
- **Bugs -** We ran into numerous bugs when developing the back-end as well as the front-end of the game
- **Code** - diagonal checking was the hardest element to code
- **Confusion**: We created many variables so it was difficult to keep track of which is which
- **Nested Code**: Readability was slightly difficult with for loops and if statements nested inside an existing while loop.

Possible Enhancements

- Add CPU option if individual wants to play computer
- Better and more interactive interface
- Improve graphics
- Adding Replay Feature

Thank You for Listening