# **Chess Program**

### **Objectives**

* Create a console-based chess game.
* Implement basic functionality, input handling, and display.
* Include unit tests and validations.

### **Requirements**

1. **Board Setup:**
   1. Initialize a standard 8x8 chessboard with pieces using symbols (e.g., 'P' for pawn, 'Q' for Queen, 'K' for king, etc).
2. **Game Play:**
   1. Print the board with current piece positions.
   2. Allow players to select a piece by entering coordinates and move it by entering a destination coordinate.
   3. Display updated board after each move.
   4. End the game when a king is captured.
3. **Input Handling:**
   1. Allow input in the format: start\_row,start\_column end\_row,end\_column.
      1. Example: 1,3 2,3 OR b2,b3 → will move a piece from b2 to b3
   2. Validate input (e.g., format, boundaries).
4. **Unit Tests:**
   1. Test board initialization.
   2. Test valid and invalid moves for different pieces.
   3. Test win condition (king capture).
5. **Common Validations:**
   1. Ensure moves are legal according to chess rules.
   2. Validate player input and handle errors gracefully.
   3. Prevent illegal board modifications.

\*Please create a README file of how to run the program.