

Program Screenshots

VS Code interface showing a chess game application. The Explorer pane on the left lists files: `main.py`, `README.md`, `engine.py`, `fen_dataset.pt`, `train_model.py`, and `uci_engine.py`. The main editor displays `main.py` with the following content:

```
1 # Chess Game that Uses ML for Suggesting Next Moves
2 ## Spring 2025 CS4200 Assignment 2
3
4 ## Kelly Lwin
5
6 ### Install Requirements
7 pip install python-chess torch cairosvg tqdm zsh
8
9 Chess pieces images from https://commons.wikime
10 By en:User:Cburnett, CC BY-SA 3.0, https://comm
11
12 ### Running the Application
13 python main.py
```

The terminal output shows:

```
PS C:\Users\646ca\Downloads\CPP Spring 2025\KellyLwinAss
[Done] exited with code=0 in 45.736 seconds
```

The chess board window displays a standard chessboard. The bottom status bar indicates "Ln 13, Col 15, Spaces: 4, UTF-8, CRLF, Markdown".

The second screenshot shows the same interface with a red box highlighting the terminal output:

```
[Running] python -u "c:\Users\646ca\Downloads\CPP Spring 2025\KellyLwinAss
AI plays: b7b5
Suggested White move: c2c3
```

The chess board window now shows a red arrow pointing from the white king to the square c2, indicating a suggested move.

engine.pymain.py

main.py > ...
// print("illegal move")
78 except Exception as e:
79 print("Invalid input:", e)
80
81 # get ai move, print it, and update board
82 def ai_move(self):
83 if self.board.turn:
84 return
85 move = engine.best_move(self.board.fen())

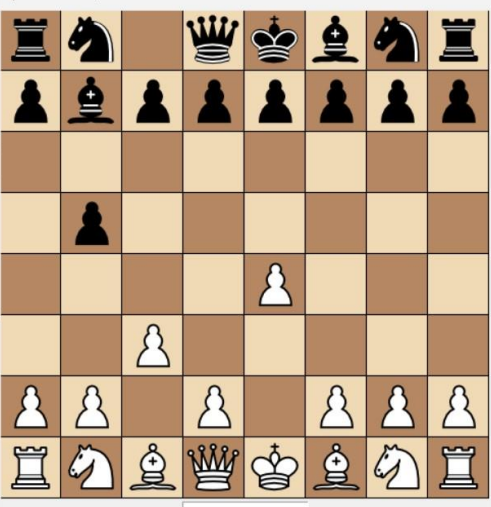
OPEN EDITORS OUTPUT TERMINAL Filter
Suggested White move: c2c3

[Done] exited with code=0 in 45.736 seconds

[Running] python -u "c:\Users\646ca\Downloads\CPP Spring 2025\KellyLwinAssign
AI plays: b7b5

Suggested White move: c2c3
AI plays: c8b7
Suggested White move: a2a3

CS4200 Assignment2 Chess ML



Move