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<<<<Chess game>>>>

Game flow:

- Each player can arrange their characters on their end in any order. They will have 5 pawns to start with and will need to deploy all of them at the start of the game.

- The input for initial character positions will be taken as a list of character names, placing them from left to right on the starting lanes. Once this process is complete for both the players, they can start making moves.

- The application then takes move inputs from the players, alternating between the players, updating the game state in the process.

- Input move format: <character_name>:<move> (e.g. P1:L, P2:R, P3:F, P3:B)

- An invalid input move should be handled and prompted to the user(Invalid input format) and make the player retry their turn.

Invalid moves for a player:

1. Input command on a character that does not exist
2. Character going out of grid bounds.
3. Invalid move presented for a given character.
4. Targeting a friendly character, i.e a character from our own team.

- After every turn a 5 by 5 grid is displayed populated by characters.

- Prefix *character* names with *player* names upon displaying the grid. (Player A's characters should be prefixed by A-, ex:- A-P1, A-P3)

- The game ends when one *player* (winner) manages to kill all *characters* of their opponent. The winner is prompted. The players can then choose to play another game.

Example cli flow:

The application prompts for user input. Player 1 selects their characters.

```
Player1 Input: P3, P2, P5, P4, P1
Current Grid:
-          -          -          -          -
-          -          -          -          -
-          -          -          -          -
-          -          -          -          -
A-P3       A-P2       A-P5       A-P4       A-P1
```

The characters are valid and can be placed on the grid, the resulting grid is displayed.

Player 2 is asked to select and place their characters on the grid.

```
Player2 Input: P2, P1, P3, P5, P4
Current Grid:
B-P2        B-P1        B-P3        B-P5        B-P4
-           -           -           -           -
-           -           -           -           -
-           -           -           -           -
A-P3        A-P2        A-P5        A-P4        A-P1
```

The players can now start making turn based moves, the application halting for user info. Player A chooses to move P1 forward. The grid stays up to date with the current game state.

```
Player A's Move: P1:F
Current Grid:
B-P2        B-P1        B-P3        B-P5        B-P4
-           -           -           -           -
-           -           -           -           -
-           -           -           -           A-P1
A-P3        A-P2        A-P5        A-P4        -
```

```
Player A's Move: P4:F
Current Grid:
B-P2        B-P1        B-P3        B-P5        -
-           -           -           -           B-P4
-           -           -           -           -
-           -           -           -           A-P1
A-P3        A-P2        A-P5        A-P4        -
```

```
Player B's Move: P1:F
Current Grid:
B-P2        B-P1        B-P3        B-P5        -
-           -           -           -           B-P4
-           -           -           -           A-P1
-           -           -           -           -
A-P3        A-P2        A-P5        A-P4        -
```

```
Player B's Move: P4:F
Current Grid:
B-P2        B-P1        B-P3        B-P5        -
-           -           -           -           -
-           -           -           -           B-P4
-           -           -           -           -
A-P3        A-P2        A-P5        A-P4        -
```

This move registers a kill and removes ‘A-P1’ from the grid, it’s place gets taken by ‘B-P4’.

Implementing all the requirements specified above makes you eligible for level 2:

Level 2:

Add the following character types to the game:

1. Hero1: In one move, it moves 2 blocks straight in any direction, and **kills anything in its path**
2. Hero2: In one move, it moves 2 blocks diagonally in any direction, and **kills anything in its path**

H1:L means Hero1 to left, H2:FL means move H2 to forward-left direction

Implement all R,L,F,B for H1 and FL, FR, BL, BR for H2

Level 3:

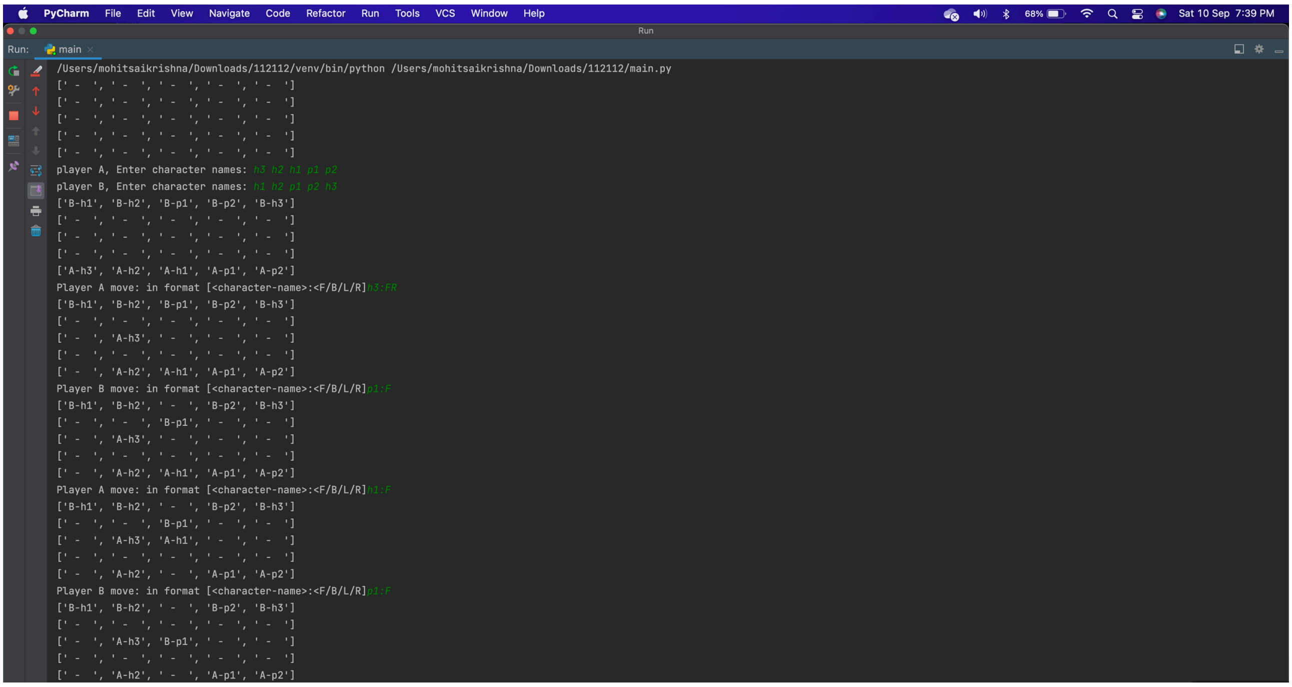
Add another character type:

Hero 3: In one move, it moves 2 steps straight and one to the side, and kills only where it finally lands

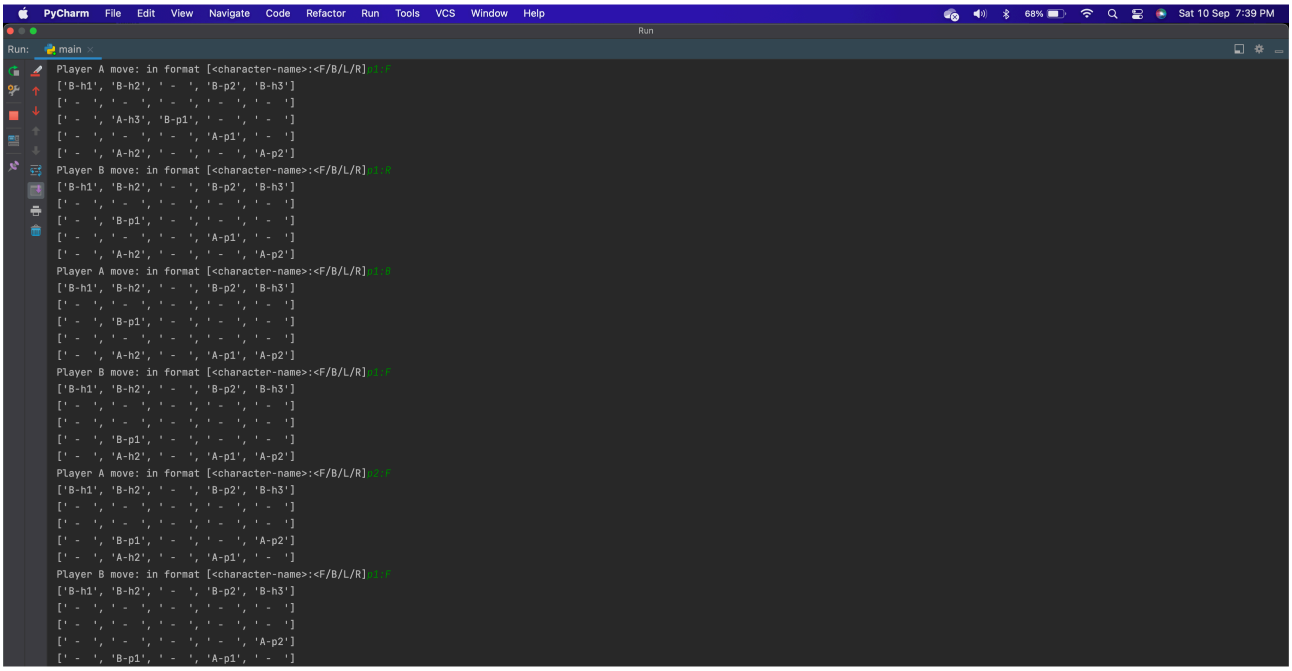
H3:FR means it moves 2 steps front and one to the right,
H3:RF means it moves 2 steps right and one to the front

Implement all FL, FR, BL, BR, RF, RB, LF, and LB for H3

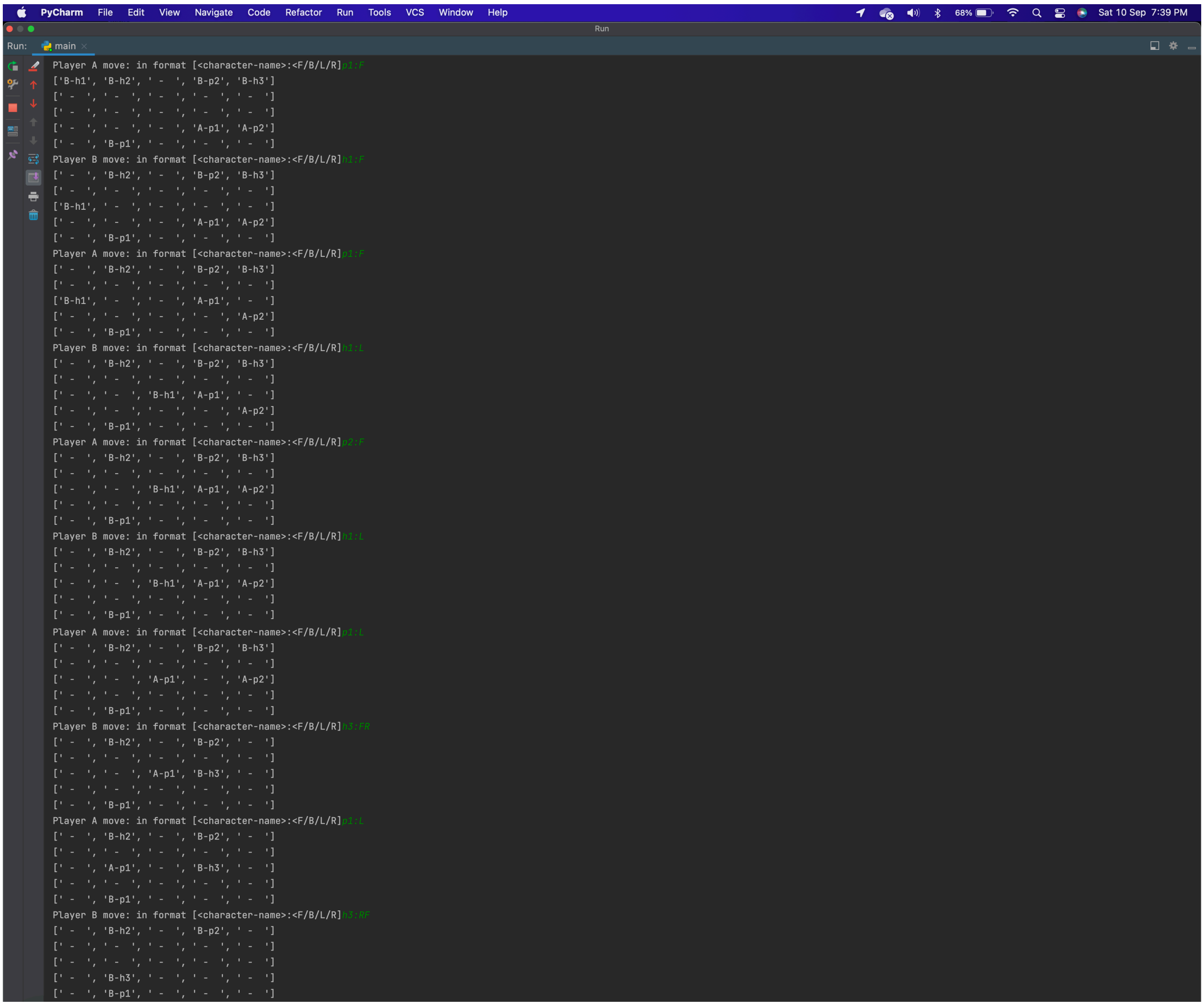
- A board is created and displayed first to the user
- Take inputs from the user a and user b their character names
- And displaying the board again after that
- Take input from player a character name followed by move it’s going to make and make changes and show the modified board
- Do the same with player b
- These continue until either all A’s or all B’s are gone



```
/Users/mohitsaikrishna/Downloads/112112/venv/bin/python /Users/mohitsaikrishna/Downloads/112112/main.py
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
player A, Enter character names: h3 h2 h1 p1 p2
player B, Enter character names: h1 h2 p1 p2 h3
['B-h1', 'B-h2', 'B-p1', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
['A-h3', 'A-h2', 'A-h1', 'A-p1', 'A-p2']
Player A move: in format [<character-name>:<F/B/L/R]h3:FR
['B-h1', 'B-h2', 'B-p1', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-h3', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-h2', 'A-h1', 'A-p1', 'A-p2']
Player B move: in format [<character-name>:<F/B/L/R]p1:F
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', 'B-p1', ' -  ', ' -  ']
[' -  ', 'A-h3', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-h2', 'A-h1', 'A-p1', 'A-p2']
Player A move: in format [<character-name>:<F/B/L/R]h1:F
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', 'B-p1', ' -  ', ' -  ']
[' -  ', 'A-h3', 'A-h1', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-h2', ' -  ', 'A-p1', 'A-p2']
Player B move: in format [<character-name>:<F/B/L/R]p1:F
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-h3', 'B-p1', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-h2', ' -  ', 'A-p1', 'A-p2']
```



```
Player A move: in format [<character-name>:<F/B/L/R]p1:F
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-h3', 'B-p1', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', 'A-p1', ' -  ']
[' -  ', 'A-h2', ' -  ', ' -  ', 'A-p2']
Player B move: in format [<character-name>:<F/B/L/R]p1:R
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', 'A-p1', ' -  ']
[' -  ', 'A-h2', ' -  ', ' -  ', 'A-p2']
Player A move: in format [<character-name>:<F/B/L/R]p1:B
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-h2', ' -  ', 'A-p1', 'A-p2']
Player B move: in format [<character-name>:<F/B/L/R]p1:F
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-h2', ' -  ', 'A-p1', 'A-p2']
Player A move: in format [<character-name>:<F/B/L/R]p2:F
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', 'A-p2']
[' -  ', 'A-h2', ' -  ', 'A-p1', ' -  ']
Player B move: in format [<character-name>:<F/B/L/R]p1:F
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', 'A-p2']
[' -  ', 'B-p1', ' -  ', 'A-p1', ' -  ']
```



```
Player A move: in format [<character-name>:<F/B/L/R]p1:F
['B-h1', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', 'A-p1', 'A-p2']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
Player B move: in format [<character-name>:<F/B/L/R]h1:F
[' -  ', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
['B-h1', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', 'A-p1', 'A-p2']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
Player A move: in format [<character-name>:<F/B/L/R]p1:F
[' -  ', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
['B-h1', ' -  ', ' -  ', 'A-p1', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', 'A-p2']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
Player B move: in format [<character-name>:<F/B/L/R]h1:L
[' -  ', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', 'B-h1', 'A-p1', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', 'A-p2']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
Player A move: in format [<character-name>:<F/B/L/R]p2:F
[' -  ', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', 'B-h1', 'A-p1', 'A-p2']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
Player B move: in format [<character-name>:<F/B/L/R]h1:L
[' -  ', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', 'B-h1', 'A-p1', 'A-p2']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
Player A move: in format [<character-name>:<F/B/L/R]p1:L
[' -  ', 'B-h2', ' -  ', 'B-p2', 'B-h3']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', 'A-p1', ' -  ', 'A-p2']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
Player B move: in format [<character-name>:<F/B/L/R]h3:FR
[' -  ', 'B-h2', ' -  ', 'B-p2', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', 'A-p1', 'B-h3', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
Player A move: in format [<character-name>:<F/B/L/R]p1:L
[' -  ', 'B-h2', ' -  ', 'B-p2', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'A-p1', ' -  ', 'B-h3', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
Player B move: in format [<character-name>:<F/B/L/R]h3:RF
[' -  ', 'B-h2', ' -  ', 'B-p2', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', ' -  ', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-h3', ' -  ', ' -  ', ' -  ']
[' -  ', 'B-p1', ' -  ', ' -  ', ' -  ']
```

Player B won!!