# High-Level Algorithm. Team 2 (Yasmeen, Yvette)

## 1. Initialization:

- o Create decks of 25 cards for both players using a linked list.
- o Each player has an initial HP (20).
- o Both players draw a starting hand (5 cards).

## 2. Gameplay Loop:

- o Until a player's HP reaches 0, repeat the following for each turn:
  - 1. Draw Phase:
    - The current player draws one card from their deck.

## 2. Play Phase:

- The player can play a card from their hand (either a unit or spell card).
- If a **unit card** is played, it is placed on the battlefield. Name of unit card, which is an attack card: *Savage Strike*
- If a **spell card** is played:
  - Damage: Opponent loses 1 HP. Name of Damage card: Viper's Bite
  - Heal: Player gains 2 HP. Name of Heal card: *Divine Renewal*
  - **Defend**: Player loses 1 HP but can defend against attacks. Name of Defend card: *Ironclad Wall*.

### 3. Attack Phase:

- The player can attack with units on the battlefield.
- The opponent can choose to defend with their own units (defending units cannot attack next turn).
- Apply unit effects (attacker loses 2 points, defender gains 1 point).

### 4. End of Turn:

• Switch to the next player.

### 3. End Condition:

o The game ends when a player's HP reaches 0, and the opponent is declared the winner.

Note: the code will use the concepts of polymorphism and inheritance and will have a GUI interface that might look like: (the white box is where the log will be kept)

