Cards

-color -> string (R,G,B,Y)

-number -> int (0-9)

-ability -> string (special characters like *, ~, +)

+isPlayable(topCard)>return if card is playable

Deck

-deckList -> card objects

+shuffle() -> mix cards

+deal() -> return card

Player

- -name -> string
- -hand -> card objects
- -isComputer -> boolean
- +GetPlayableCards(LastPlayed -> object) -> take in lastPlayed card, return list of cards that are playable
- +playComputerCard(topcard) -> computer determines which card to play based on topcard.
- +hasWon() -> return if player's hand is empty
- +handSize() -> return size of hand
- +removeCard(index) -> remove card at listed index
- +addCard(card) -> add card to hand
- +playCard() -> remove card from hand and return card

Game Controller

- -Deck -> deck object
- -Stack -> list of card objects
- -players -> list of players
- -topCard -> current card to compare with other cards
- -currentPlayerIndex -> int keeps track of player index
- -isGameOver -> boolean
- -isReversed -> boolean
- +setupGame() -> initialize game and ask for PVP or PVM
- +dealInitialCards() -> deal 7 cards to each player
- +playGame() ->main function that runs game
- +handlePlayerTurn(Player object) -> determine if player needs to draw cards and find playable cards
- +drawCard() -> draw card from deck, reshuffle if needed
- +getNextPlayerIndex() -> index of player
- +moveToNextPlayer() -> change the current player
- +getValidInput() -> force user for valid input