OOP Exercise

Introduction

Your goal in this exercise is to implement two classes, `Card` and `Deck`.

Specifications

`Card`

1. Each instance of `Card` should have a suit ("Hearts", "Diamonds", "Clubs", or "Spades").
2. Each instance of `Card` should have a value ("A", "2", "3", "4", "5", "6", "7", "8", "9", "10", "J", "Q", "K").
3. `Card` 's `__repr__` method should return the card's value and suit (e.g. "A of Clubs", "J of Diamonds", etc.)

`Deck`

1. Each instance of `Deck` should have a cards attribute with all 52 possible instances of `Card`.
2. `Deck` should have an instance method called `count` which returns a count of how many cards remain in the deck.
3. `Deck` 's `__repr__` method should return information on how many cards are in the deck (e.g. "Deck of 52 cards", "Deck of 12 cards", etc.)
4. `Deck` should have an instance method called `_deal` which accepts a number and removes at most that many cards from the end of the deck (it may need to remove fewer if you request more cards than are currently in the deck!). If there are no cards left, this method should return a `ValueError` with the message "All cards have been dealt".
5. `Deck` should have an instance method called `shuffle` which will shuffle a full deck of cards. If there are cards missing from the deck, this method should raise a `ValueError` with the message "Only full decks can be shuffled". shuffle should return the shuffled deck.
6. `Deck` should have an instance method called `deal_card` which uses the `_deal` method to deal a single card from the deck and return that single card.
7. `Deck` should have an instance method called `deal_hand` which accepts a number and uses the `_deal` method to deal a list of cards from the deck and return that list of cards.