In this assignment, I wrote three classes, they are list as below:

* Card
* Deck
* NotFreecell

Each of the class is written in separate module.

Class Card

The class Card represents a card in play, it contains attribute card\_face and card\_suit.

In this class, the \_\_init\_\_ method takes two parameters, face and suit, the data type of both are integer. Face starts from 0 to 12, and suit starts from 0 to 3.

To make they readable to human, Two list are used here to map they to readable character.

The class has two attribute, card\_face, and card\_suit, so accessor and mutator are affored here.

* get\_face(self)
* set\_face(self, face)
* get\_suit(self)
* set\_suit(self, suit)

Finally, the \_\_str\_\_ method is implemented here to print readable string, the \_\_eq\_\_ method is also implemented here, which is used to compare with other Card object.

Class Deck

The class Deck represents a deck which is made up of cards.

The class Deck has only one attribute: cards, the attribute contains a list of cards.

I wrote these methods list as below:

* def \_\_init\_\_(): init the cards
* def shuffle(): shuffle the cards
* def add\_card(): add a new card to the deck
* def isIn(): judge if the card is in the deck
* def isEmpty(): if the deck is empty
* def \_\_len\_\_(): get the number of cards in deck
* def \_\_str\_(): return a readable string
* def draw(): draw all the cards in the deck
* def deal(): deal a card from the deck

Class NotFreecell

The class NotFreecell is defined in the freecell.py, it’s the main part of the game.

In this class, I did jobs list as below:

First, initiate the game, mainly initiate the tableaus, cells and foundations.