Playing With Cards

In the next few weeks, you will learn how to use classes to define new types. But first, this exercise illustrates the benefits of doing so. In it, you will use two application-specific types that we provide to simplify coding card games.

To start, we'll walk through execution of the program cardsDemo.py. This demo program imports the module cards.py, which defines a Card class and a Deck class. The classes define the representations of Card and Deck objects\(^1\) and the implementations of methods and operations for manipulating Card and Deck objects. The classes are designed so that a programmer can use a Card object to represent an actual playing card, a Deck object to represent an actual deck of playing cards, and their methods and operations to represent standard ways that card players manipulate cards and decks, such as shuffling a deck, dealing out cards, comparing cards to one another, and so on. The demo program serves to illustrate what you can do with Card and Deck objects.

We won't execute cardsDemo.py directly; rather, we'll execute another program that allows us to pause the execution and display what will be executed next. You should follow along on the handout of cardsDemo.py. When we reach a pause, discuss with your partner what will be printed. Put a pink tent on your monitor when you have a question and a green tent when you have an answer.

\textbf{Pause(...)} #1:

\textbf{Pause(...)} #2:

\textbf{Pause(...)} #3:

\textbf{Pause(...)} #4:

\^1 i.e., objects of type \texttt{Card} and objects of type \texttt{Deck}.

Pause(...) #5:

Pause(...) #6:

Pause(...) #7:

Pause(...) #8:

Pause(...) #9: