Final Project – Poker

Poker is a family of card games that combines gambling, strategy, and different skills. All poker variants involve betting as an intrinsic part of play and determine the winner of each hand according to the combinations of players' cards, at least some of which remain hidden until the end of the hand. Poker games vary in the number of cards dealt, the number of shared or "community" cards, the number of cards that remain hidden, and the betting procedures.

[Source: Wikipedia]

- To Do before coding:
  - Investigate the rules of the game.
  - Investigate all the possible combinations to do with the cards. E.g. a hand of 4 cards of the same value is a “Poker”.
  - Investigate which hand wins against other hand. E.g. Two pairs win vs one pair
  - Given the rules of the game and the possible hands generate at least 10 different tests to verify if your code is working correctly. Tip: Not only tests to see which hand is better, also tests to see that there are no cards repeated across all hands, or in the deck.
- Algorithms to code:
  - Deck generation (52 different cards)
  - Deck shuffling
  - Dealer’s and user’s cards
  - Game dynamics (betting system)
  - Decide the Winner over one match
  - Decide the Winner Globally
- Before coding any algorithm, it is necessary to do the pseudocode or the flowchart of each one
- It is necessary to do a flowchart indicating the global interaction among all the functions

- Deliveries: (100%)
  - Tests scenario to validate functionality of each algorithm and different possible cases (10%)
  - Pseudocodes or flowcharts of each algorithm to code in pdf (10%)
  - Flowchart of the global interaction among all the functions in pdf (5%)
  - Python code of each algorithm in a python file (40%)
  - Python code of the global interaction in a python file (10%)
  - Python code with Execution and validation of each test scenario (25%)
  - Total files to deliver: 6