# Can you beat the dealer at 21?

## Model the game

- · create a single deck of playing cards
- two players (called Sam and the Dealer) who will play against each other
- each player is given two cards from the top of a shuffled deck of cards

#### Rules to implement

- determine score of a hand[1]
- check if either player has blackjack (21) with their initial hand and wins the game
- if neither player has blackjack then Sam can start drawing cards from the top of the deck
- Sam should stop drawing cards from the deck if their total reaches 17 or higher
- Sam has lost the game if their total is higher than 21
- when Sam has stopped drawing cards the Dealer can start drawing cards from the top of the deck
- the Dealer should stop drawing cards when their total is higher than Sam.
- the Dealer has lost the game if their total is higher than 21
- determine which player wins the game
- Sam wins when both players starts with 21
- Dealer wins when both players starts with 22

[1] Numbered cards are their point value. Jack, Queen and King count as 10 and Ace counts as 11.

#### Input

The game should be able to read a file containing a deck of cards, taking the reference to the files as a command line argument, as a starting point. If no file is provided, a new shuffled deck should be initialized.

The list is in the following format:

CA, D4, H7, SJ,..., S5, S9, D10

#### Suits:

C: Clubs
D: Diamonds

D: Diamond: H: Hearts S: Spades

#### Values:

```
2: 2
3: 3
...
10: 10
J: Jack
Q: Queen
K: King
A: Ace
```

# Output

At the end, the solution should print the name of the winner to standard out, together with the hands of both the dealer and Sam. Using the following format:

```
[sam|dealer]
sam: card1, card2,..., cardN
dealer: card1, card2,..., cardN
```

## **Example**

When supplied with the following cardlist:

CA, D5, H9, HQ, S8, The output should look like:

```
sam: CA, H9
dealer: D5, HQ, S8
```

# **Testing**

The solution should include tests.