SECTION 11: MILESTONE PROJECT - 2 hours 18 minutes, 12 sections

- **2/12 Card Class**
  - -> the card class and global variables which can be used
  - -> the suit of the card, rank, value
  - -> a deck class (52 cards, generating a deck)
  - -> then the player

  - **-> in the .ipynb file**
    - **creates card class**
      - class Card:
        - def __init__(self, suit, rank) <- we initialise the class
          - -> the value is automatically given (we write code to do this later)
          - -> self.suit = suit
          - -> self.rank = rank
        - def __str__(self): <- then we are defining methods to use on the card
          - return self.rank + " of " + self.suit

    - **then create instances of the class to see if the code is working or not**
      - two_hearts = Card("Hearts", "Two")
      - -> then she's changed the class to include an __str__(self) section
      - -> then printing two_hearts returns information about it
      - -> she's then using a dictionary of values to convert "Two" into 2
        - i.e 'Two':2 <- 'Two' is a key in the dictionary

    - **you can then use values[two_hearts.rank]**
      - -> self.value = values[rank]
      - -> the values have to be entered in a certain form

  - three_of_clubs = Card("Clubs", "Three")
  - **then three_of_clubs. <- enter shift tab and you can see the different methods which can be ran**

  - **-> then she compares two cards**
    - **-> this can be done using a < statement**
    - -> card classes can represent global variables or an entire imported library
      - random shuffles

  - **-> she then creates two more objects**
    - -> lists of all the suits and ranks
    - -> tuples
    - **-> there is one tuple containing the suits (...,...,...,...)**
    - -> and then another for ranks
    - -> a dictionary for values (to convert 'Two' into 2 e.g with a key)

  - -> the suit and rank
  - -> and then the value lookup