2a. My program was written in Python and was created as a game to provide entertainment as well as display how Boolean logic can be used to check multiple qualities of an object and assign them different values. The video shows an execution of the code, which simulates a 1 hand version of Five Card Draw Poker. It also scans over the setup for the code as well as one of the chunks of analysis it does in order to determine the value of the hand.

2b. One of the primary points of the development process was research, I went in with the idea that an if statement can check if a card value is higher than another or if two cards had the same value, but I did not have nearly enough knowledge of the Python language in order to carry out the task when I started. I used many sources on the internet, primarily class-provided material and forum questions from other python programmers, to find libraries that could perform the functions I hoped to do. I then spent many hours using my incomplete knowledge to fulfill the ideas I had for my program. Once I had the outline for how the code was executed, I began the point of writing the code of the program. While I use libraries suggested on programming forums and my variables won't be totally unique, I wrote the entire program myself. I established a starting point, being the initial deal of a Five Card Poker hand, and an end point, being the determination of the value of this hand, and worked through each step along the way.

2c.**The following is a selected portion of my code that is used to determine if the hand held by the player is a royal flush:**

```
def check_RF():#Now that card values and suits can be easily checked, begins checking what type of hand the player has, starting with the best hand, a royal flush
    global hand
    if suits[0] == suits[1] and suits[0] == suits[2] and suits[0] == suits[3] and suits[0] == suits[4]: #If all of the cards have the same suit, proceed to check if it's a royal flush. If not, go to check for Four of a Kind
        if hc == 'Ace': #If the high card is an Ace, and you have a flush, Proceed to check RF
            if card_value[0] == 13 or card_value[1] == 13 or card_value[2] == 13 or card_value[3] == 13 or card_value[4] == 13: #If they have a King and an Ace and all cards same suit
                if card_value[0] == 12 or card_value[1] == 12 or card_value[2] == 12 or card_value[3] == 12 or card_value[4] == 12:#If they have Queen, King and Ace and all cards same suit
                    if card_value[0] == 11 or card_value[1] == 11 or card_value[2] == 11 or card_value[3] == 11 or card_value[4] == 11:#If they have a Jack, Queen, King and Ace and all same suit
                        if card_value[0] == 10 or card_value[1] == 10 or card_value[2] == 10 or card_value[3] == 10 or card_value[4] == 10:#If they have Ten through Ace all in same suit (i.e. Royal Flush) set hand as a royal flush
                            hand = 'Royal Flush in ' + suits[0]
```

```
                            show_hand()
                        else:#If They don't have the ten in that suit then it
is just a flush
                            hand = 'Flush in ' + suits[0]
                            show_hand()
                    else:#If they don't have the jack in that suit, it doesnt
matter if they have the ten, no RF just a flush
                        hand = 'Flush in ' + suits[0]
                        show_hand()
                else:#If they don't have the queen in that suit, not a royal
flush, but it is a flush
                    hand = 'Flush in ' + suits[0]
                    show_hand()
            else:
                check_SF() #If the player has an Ace but no King, they could
have a 5 high straight flush
        else:
            check_SF() #If the high card is not an Ace, the hand could still be
a straight flush
    else:
        check_FOAK() #if not all cards same suit
```