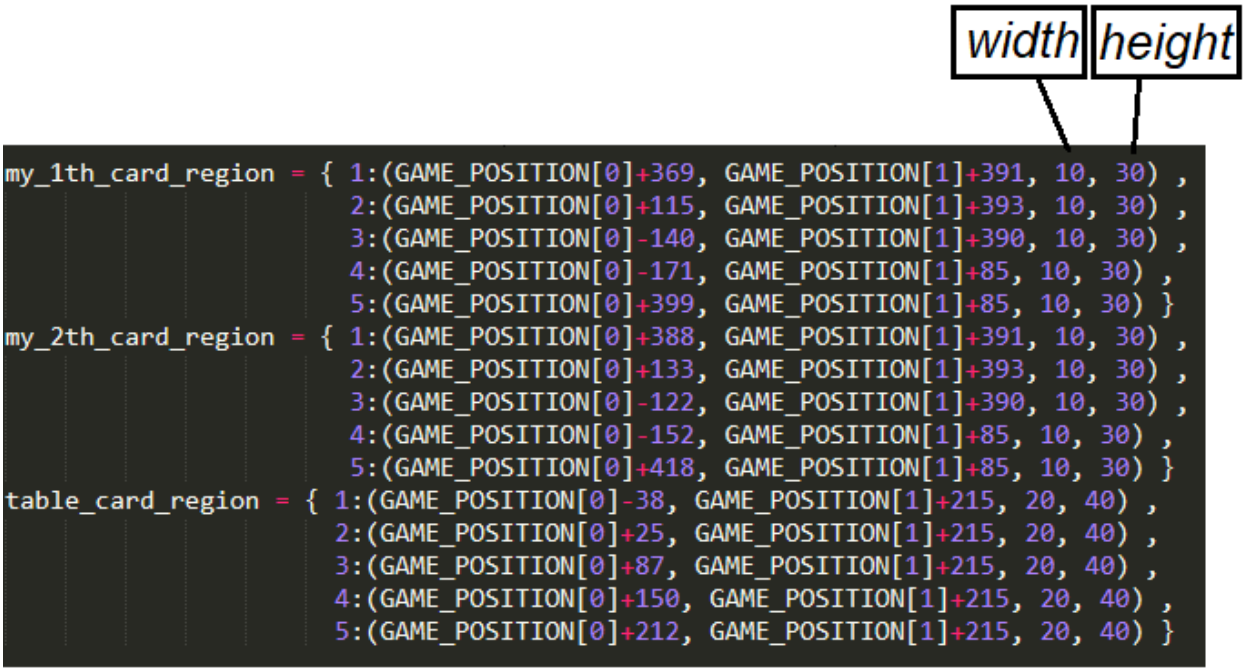
Creating source cards manual

1. Crop and create a sub image from the table to use it as a ***reference image.png*** to set GAME_POSITION constant (x,y)

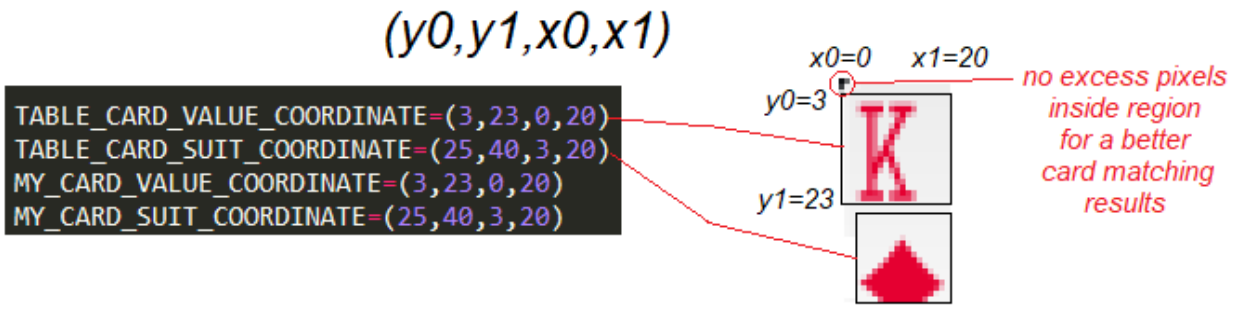
```
find_game_reference_point_from_image_file("reference image.png")

#This function will return GAME_POSITION constant (x,y)
```

2. Find the other card coordinates in accordance with GAME_POSITION constant.

3. Set all 15 cards regions (5 table cards + 10 cards of mine if table is 5 player) inside ***crop_raw_card_image()*** function at ***create_source_cards_images.py*** module.



4. Set these coordinate as global constants at the beginning of ***create_source_cards_images.py*** module like below to crop suit and value from a card. (suit and value coordinates of table cards may differ from my cards, because the table card sizes may differ from my card sizes.)

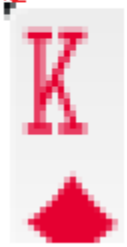


Notes:

1. Use specific top left corner pixel of a card as a sign to find and set similar card regions.

```
(GAME_POSITION[0]+87, GAME_POSITION[1]+215, 20, 40)
```

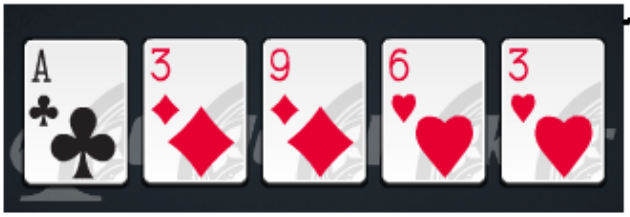
specific top left corner pixel of a card as a sign



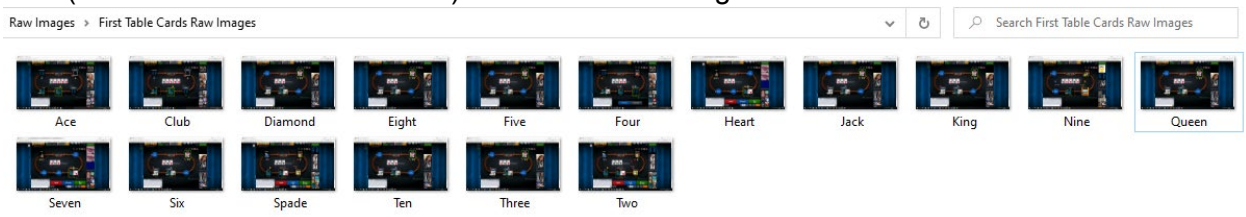
2. Set top left corner of table card regions to the same height from game position reference point.

```
table_card_region = { 1:(GAME_POSITION[0]-38, GAME_POSITION[1]+215, 20, 40) ,
                      2:(GAME_POSITION[0]+25, GAME_POSITION[1]+215, 20, 40) ,
                      3:(GAME_POSITION[0]+87, GAME_POSITION[1]+215, 20, 40) ,
                      4:(GAME_POSITION[0]+150, GAME_POSITION[1]+215, 20, 40) ,
                      5:(GAME_POSITION[0]+212, GAME_POSITION[1]+215, 20, 40) }
```

All the same height



5. Fill ***'Raw Images/First Table Cards Raw Images'*** and ***'Raw Images/My First Cards From First Seat Raw Images'*** directories with 17 Sample cards *.png* images for each(13 value cards + 4 suit cards). And name the images like below:

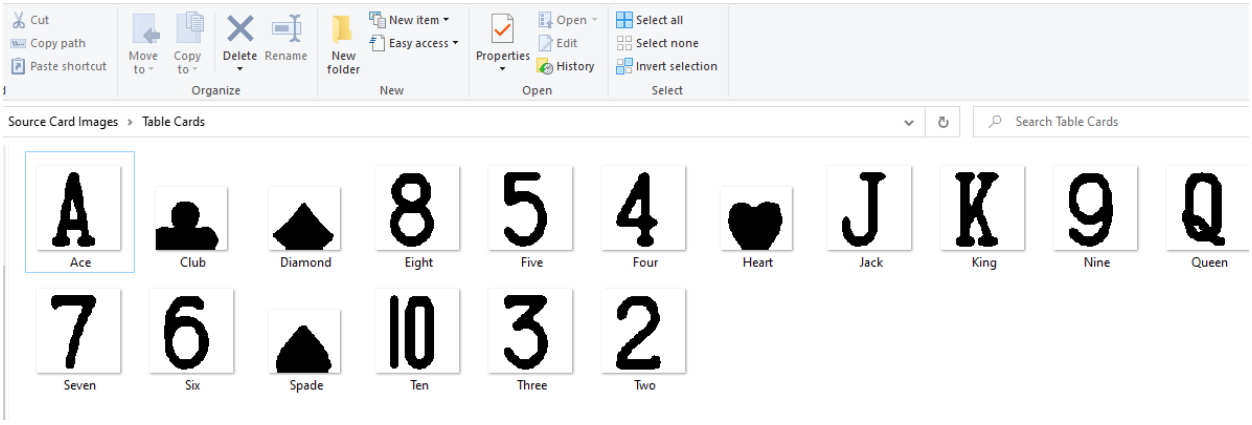


In directory: ***Raw Images/First Table Cards Raw Images***

ACE.PNG

DIAMOND.PNG

6. As the last step Run ***main()*** function at ***create_source_cards_images.py*** module, to create source cards Images.
'Source Card Images\Table Cards' directory should looks like below:



The source cards images are resized ×4, gray scaled, suit and values are cropped separately, and changed by threshold effect.

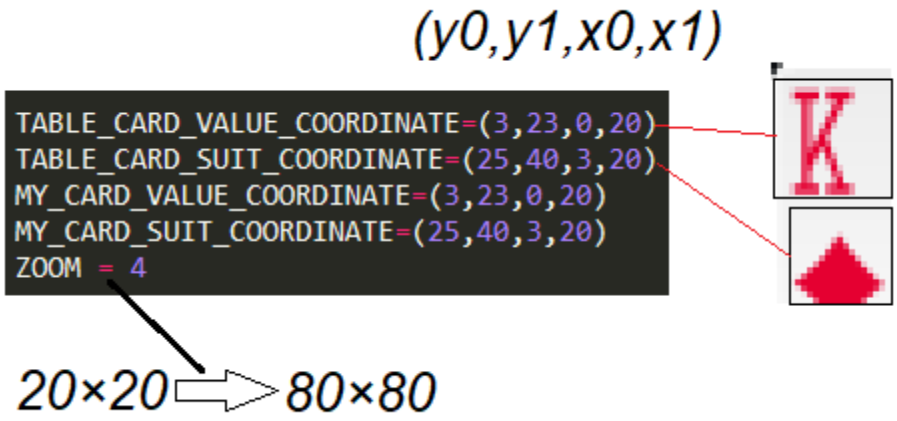
Prerequisite for testing read_card.py module

1.

1.1. Set these global constants at the beginning of **create_source_cards_images.py** and **match_card.py** modules the same:

TABLE_CARD_VALUE_COORDINATE, ***TABLE_CARD_SUIT_COORDINATE***,

MY_CARD_VALUE_COORDINATE, ***MY_CARD_SUIT_COORDINATE***, ***ZOOM***



1.2. Functions they are used in:

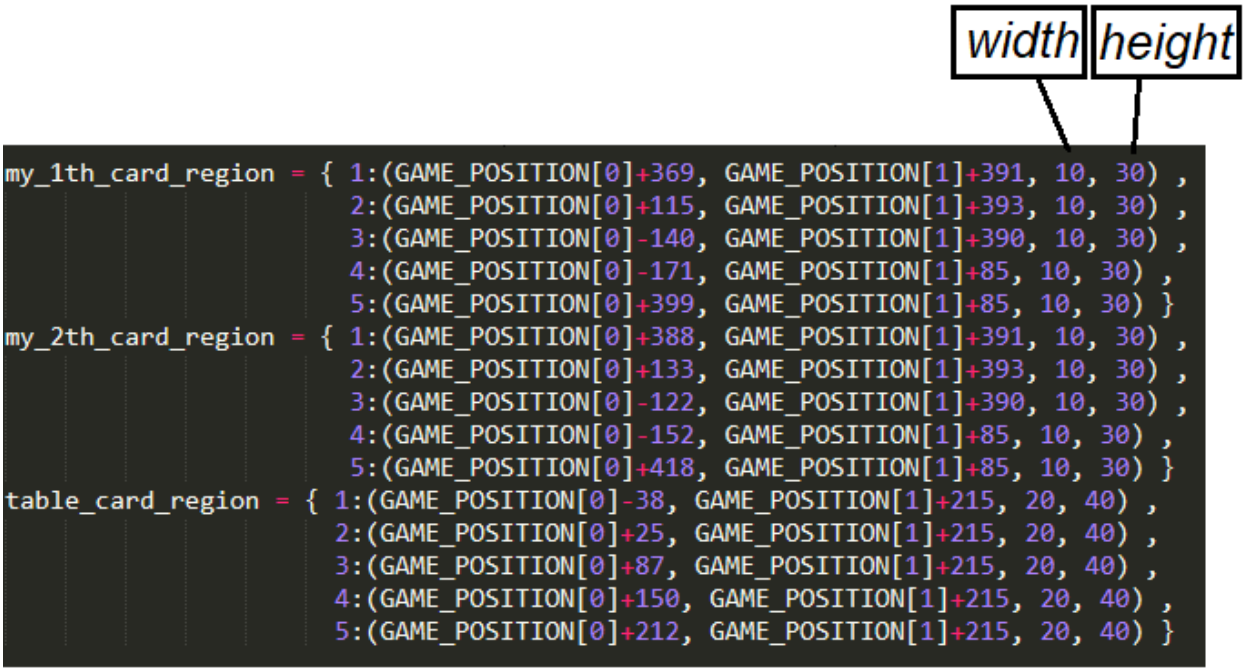
create_source_cards_images.create_source_cards()

and ***match_card.pre_process_query_image()***

2.

2.1. Set these constants the same between **create_source_cards_images.py** and **read_cards.py**:

my_1th_card_region, ***my_2th_card_region***, ***and table_card_region***



2.2. Functions they are used in:

create_source_cards_images.crop_raw_card_image()

and ***read_card.download_my_card() read_card.download_table_card()***