

Report for Exercise 1

Mutaz Manaa

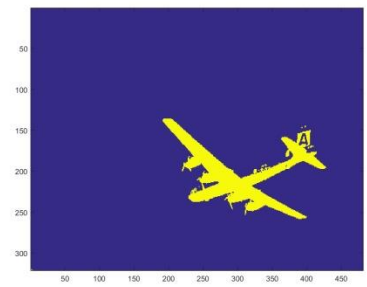
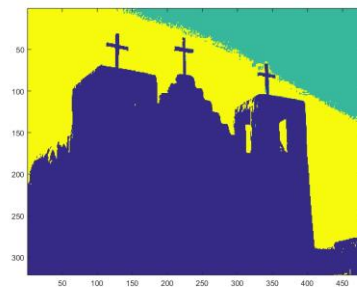
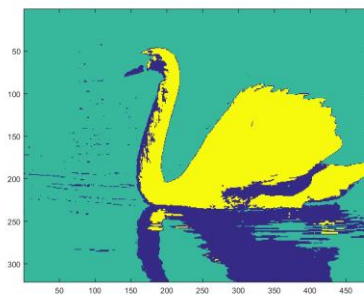
ID: 200750453

Mutazmanaa

Result for Part2 :

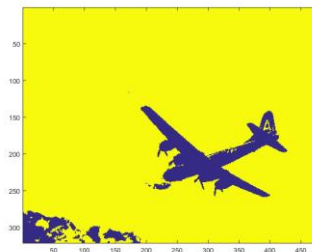
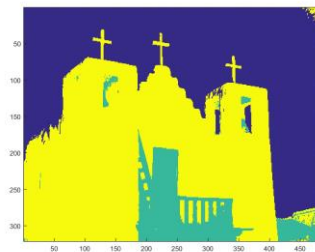
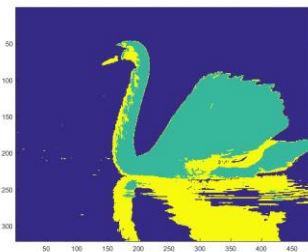
Parameters:

```
num_runs = 18;  
change_thresh = 1;  
max_iter = 180;  
u = 0;
```



Parameters:

```
num_runs = 18;  
change_thresh = 1;  
max_iter = 180;  
u = 0.025;
```

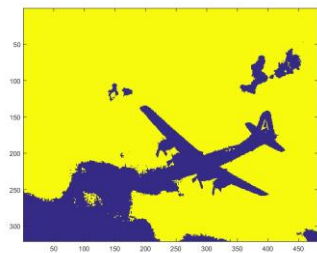
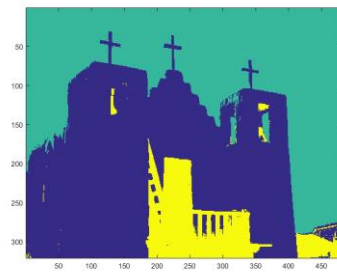
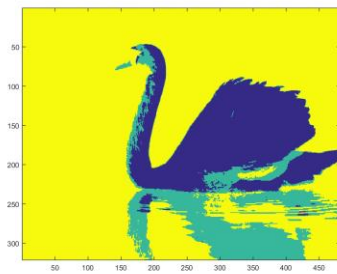


results for BonusPart1:

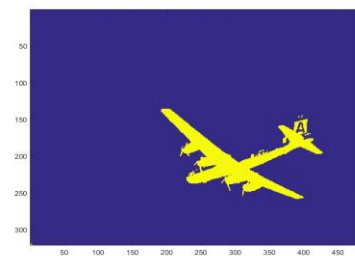
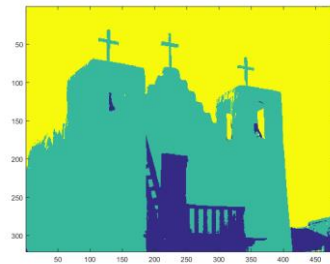
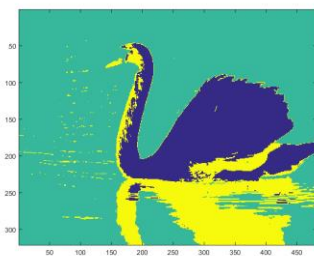
I choose to add a feature called isEdge but I didn't see anything new in the clustering then I choose to add intensities values feature with the RGB form.

Parameters:

```
num_runs = 18;  
change_thresh = 1;  
max_iter = 180;  
u = 0;
```

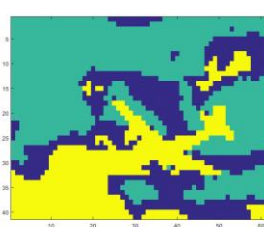
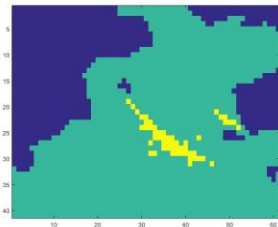
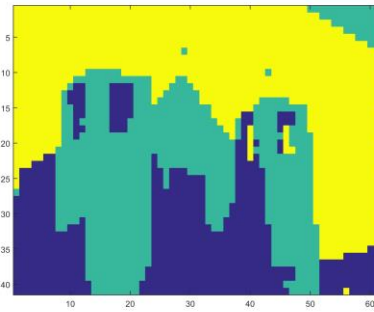
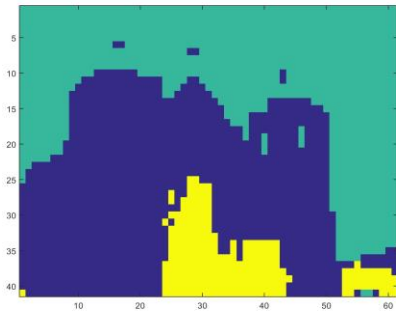
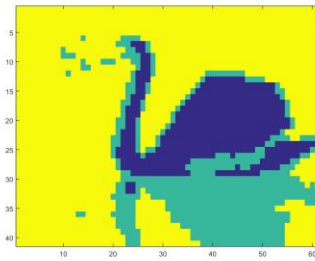
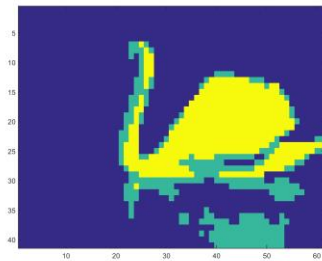


```
num_runs = 18;  
change_thresh = 1;  
max_iter = 180;  
u = 0.025;
```



Results for Part4:

Imagenum	1	2	3	4	5	6
segmac	9	9	5	22	5	18
segmas	10	12	7	85	27	990
k	3	3	3	3	3	3
algo	rc	rc	rc	nc	nc	nc
factor	1/8	1/8	1/8	1/8	1/8	1/8



The left column is the rc algorithm and the left column is the nc algorithm

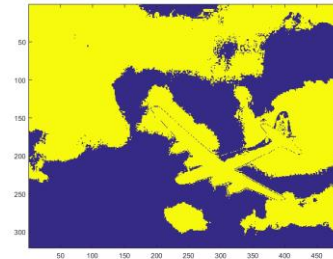
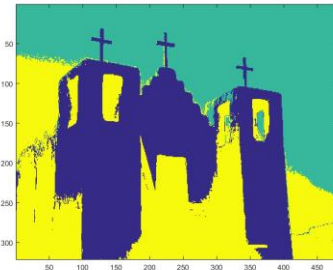
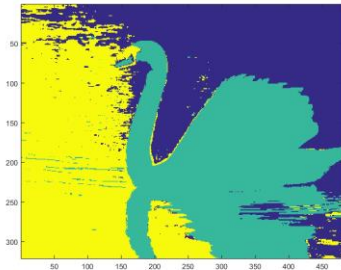
The inputs of th KMEANS:

```
num_runs = 15;
change_thresh = 1;
max_iter = 95;
```

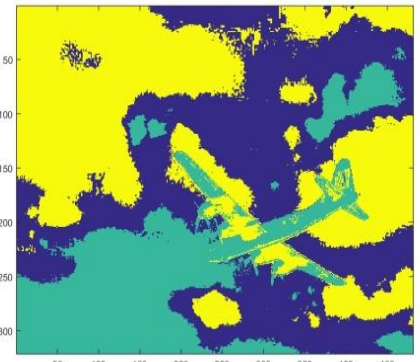
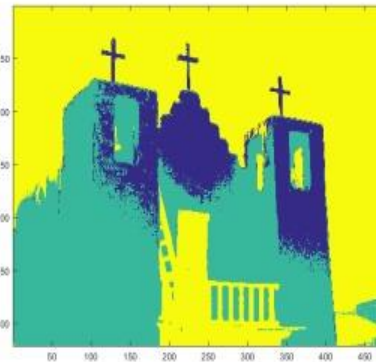
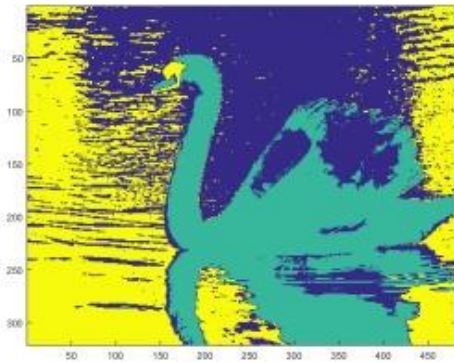
Results for Part5:

I tried almost same parameters as Part4

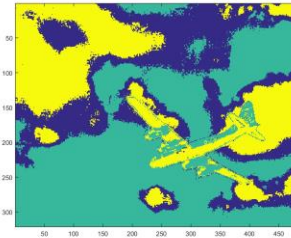
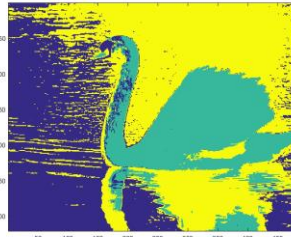
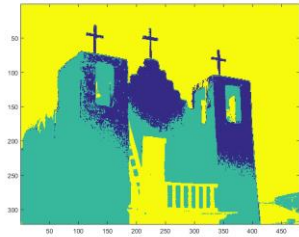
For $n = 50$:



For $n = 100$:



For $n = 200$:



For $n = 400$:

