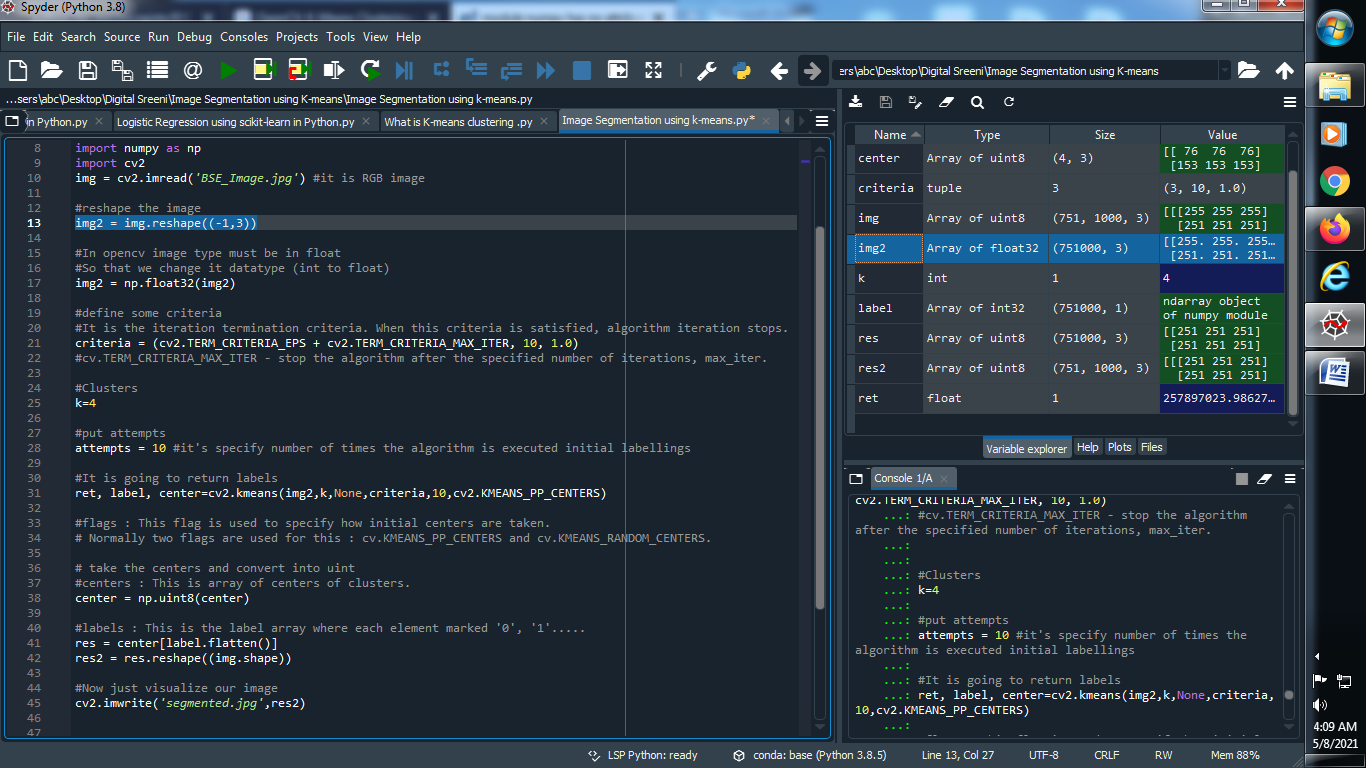
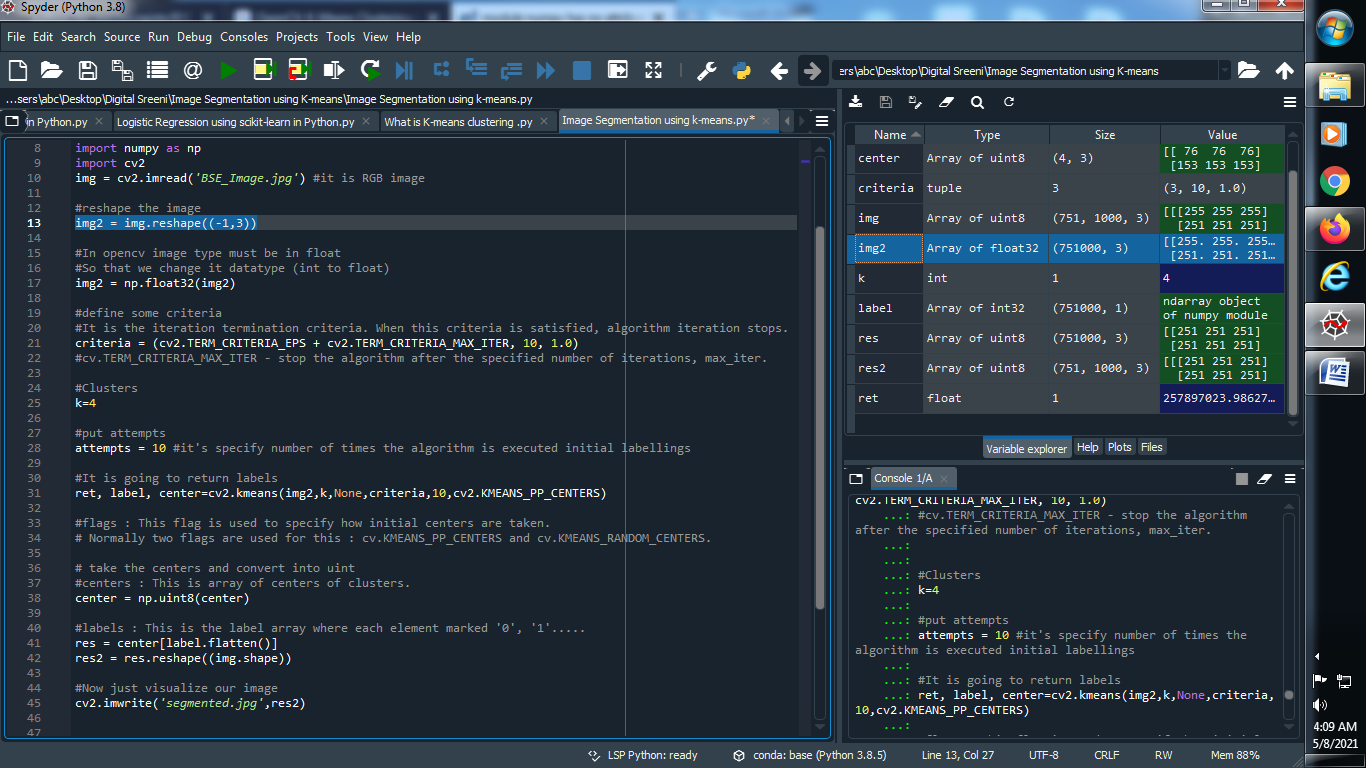
**Image Segmentation using k-means :**

**(1) Reshape our image :**

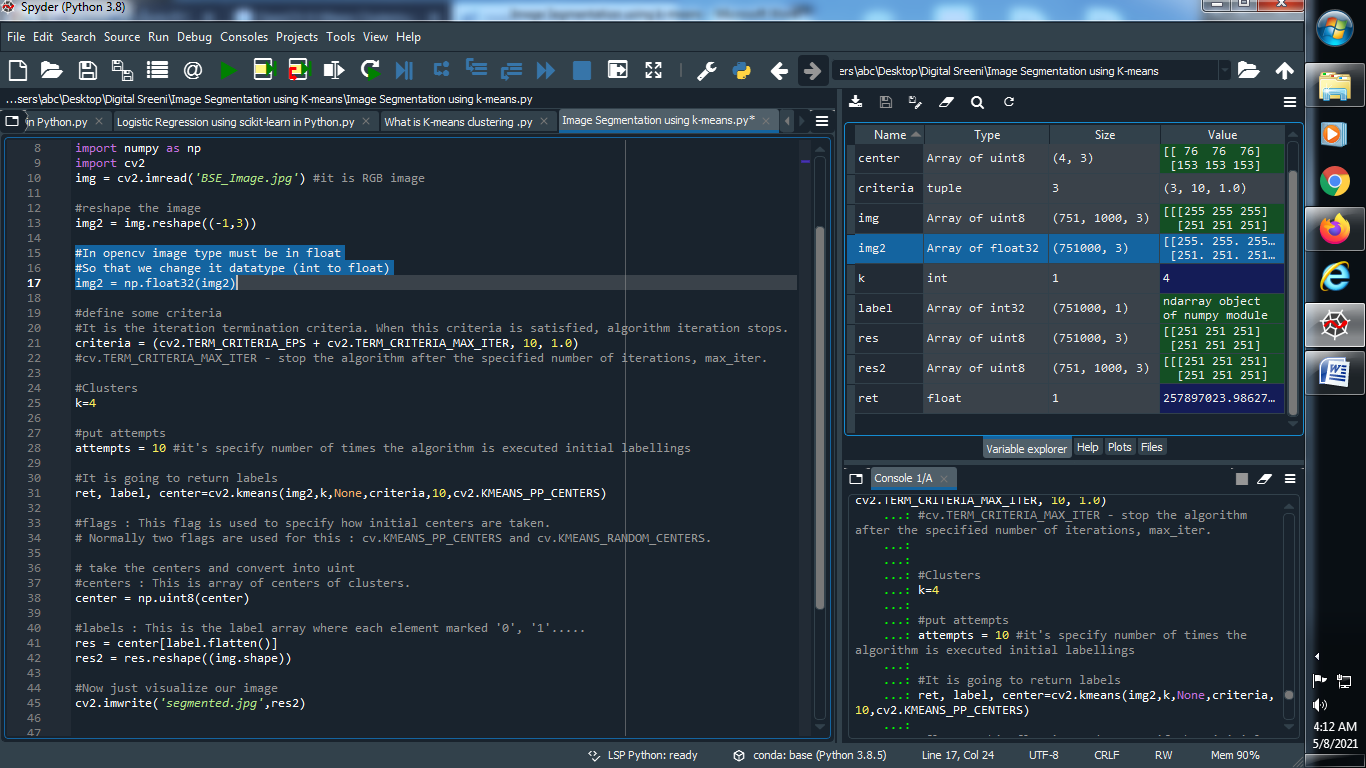
****

**Output :**

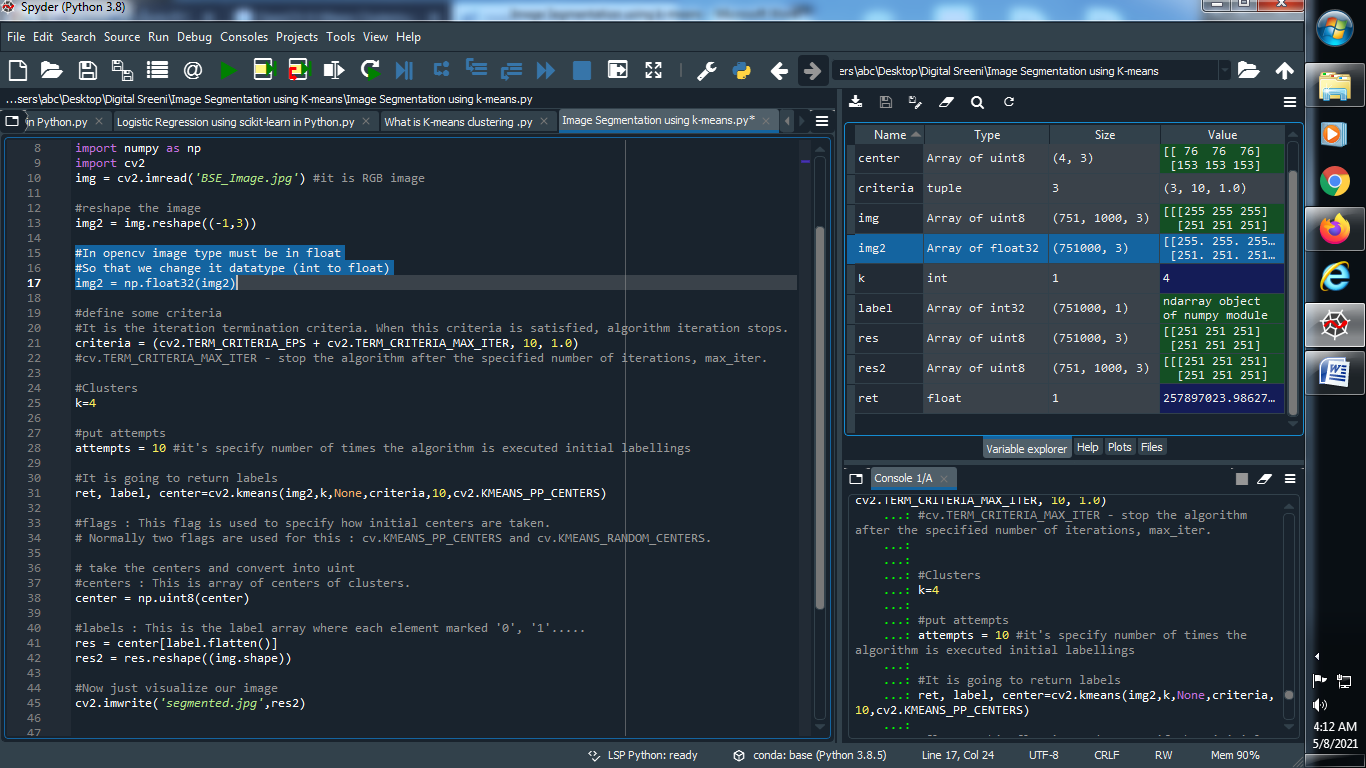
****

**(2) Change data type of image :**

**Note : In Opencv image must in float so we reshape our image int to float..**

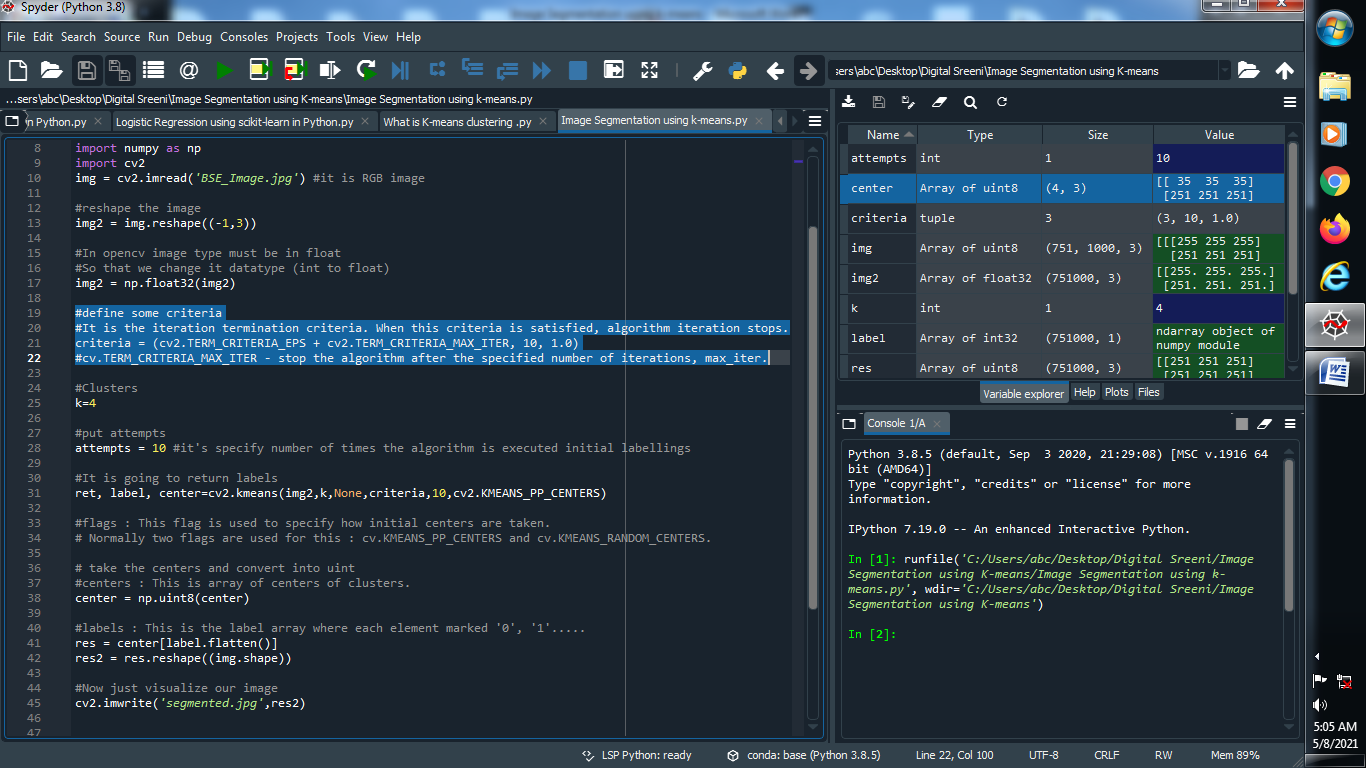
****

**Output :**

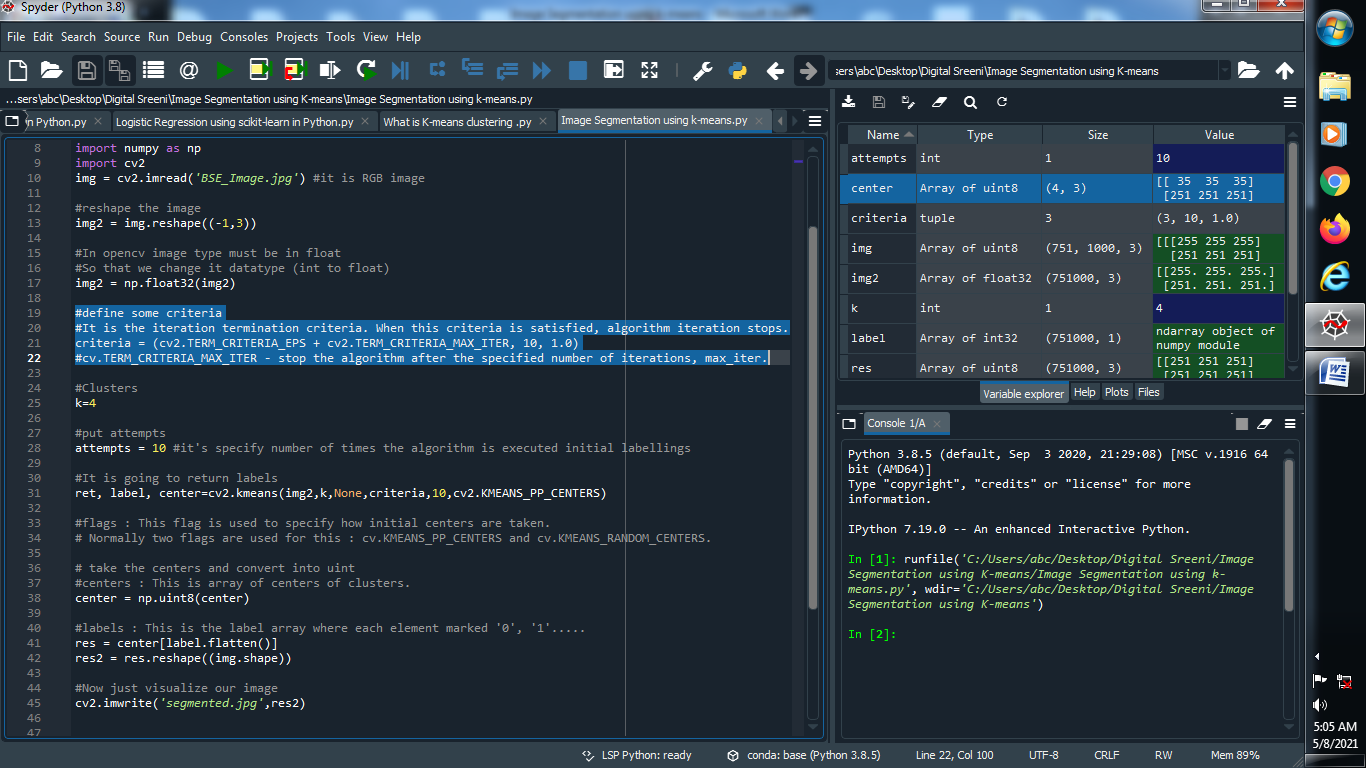
****

**(3) Define some criteria :**

**Note : criteria means iteration termination ..when this criteria is satisfied, algorithm iteration stops.**

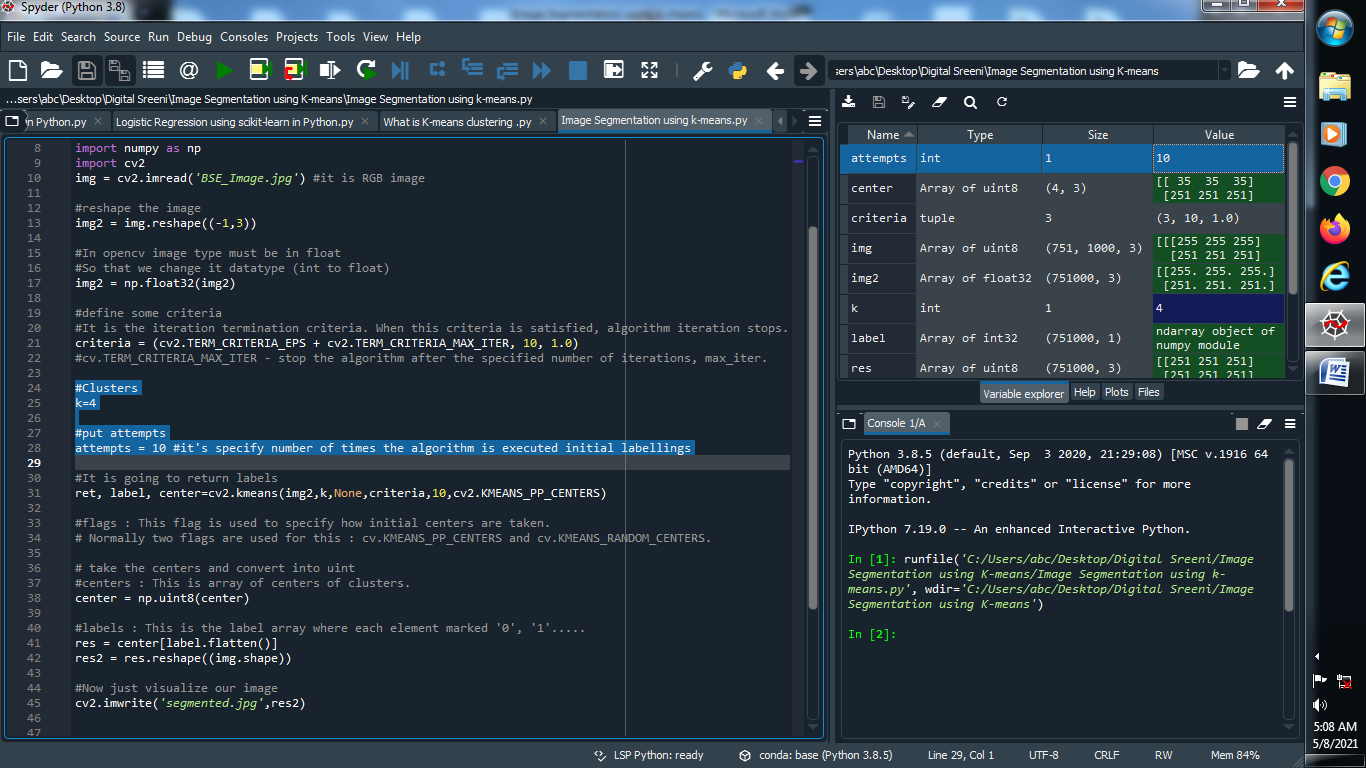
****

**Output :**

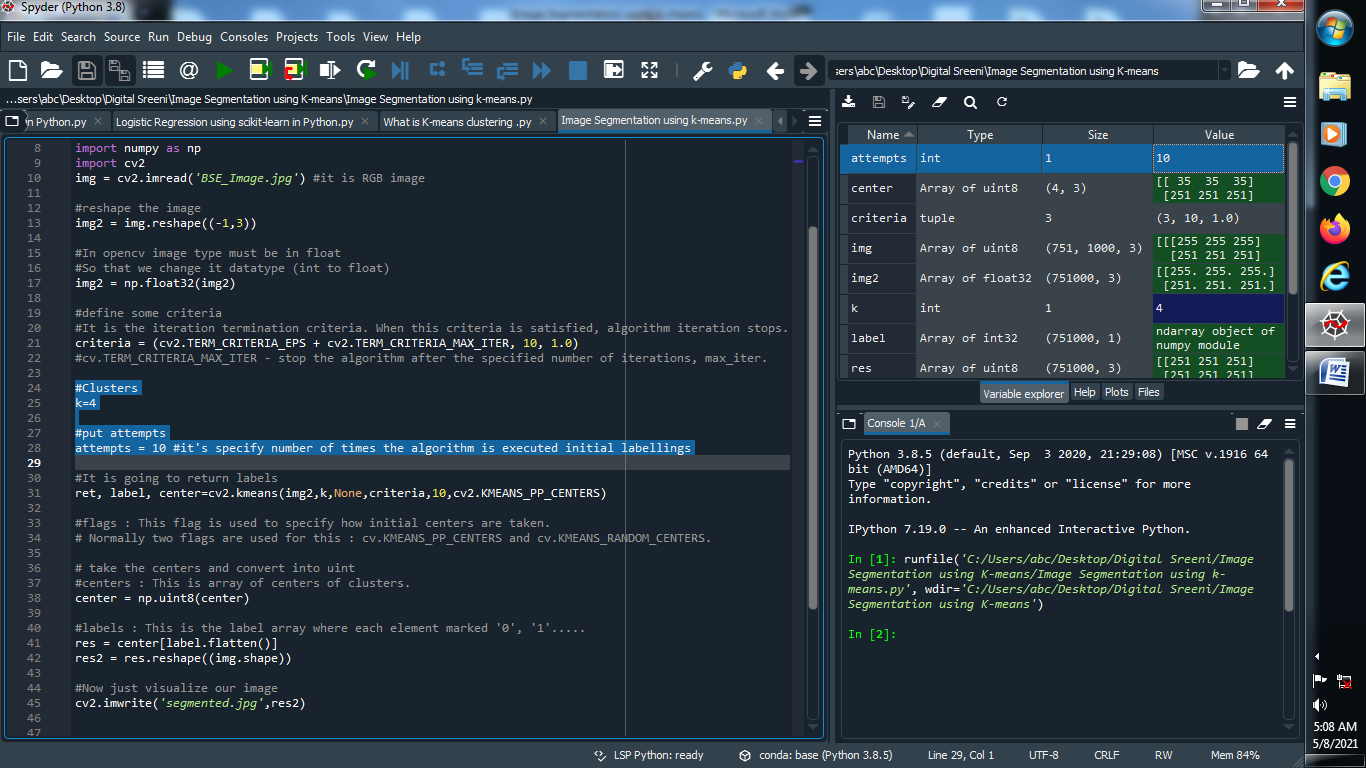
****

**(4) Assign the clusters and put attempts :**

**Note : attempts means it’s specify number of times the algorithm is executed initial labelings .**

****

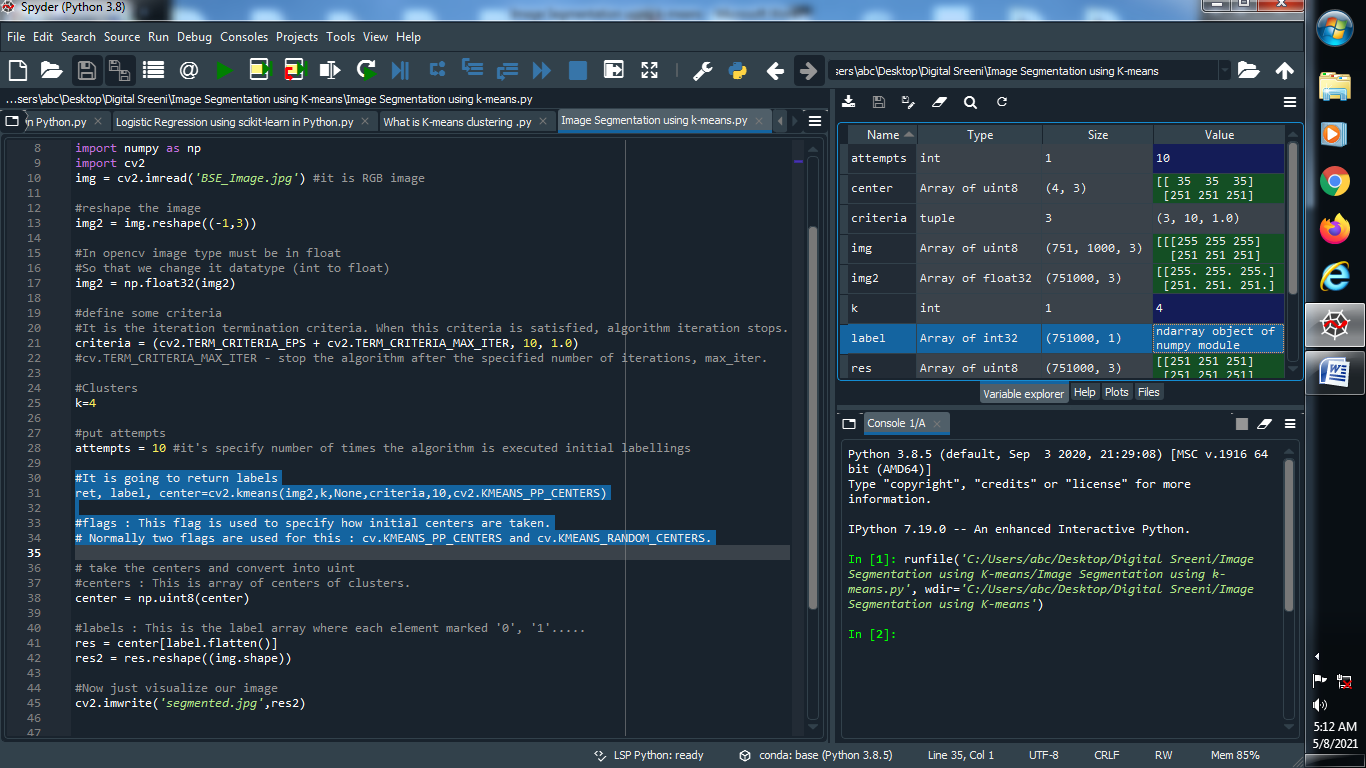
**Output :**

****

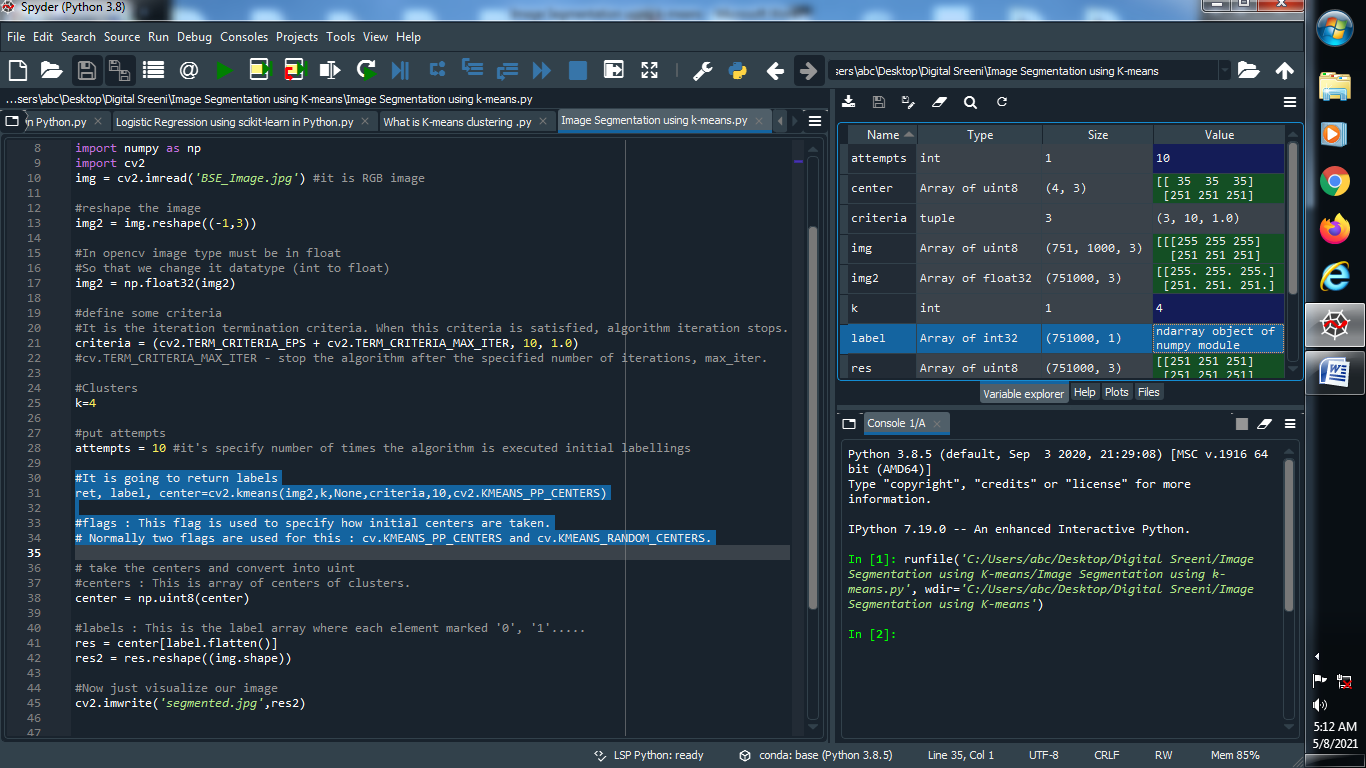
**(5) Return labels :**

**Note : flags means it is flag is used to specify how initial centers are taken.**

**Normally two flags are used for this : cv.KMEANS\_PP\_CENTERS and cv.KMEANS\_RANDOM\_CENTERS.**

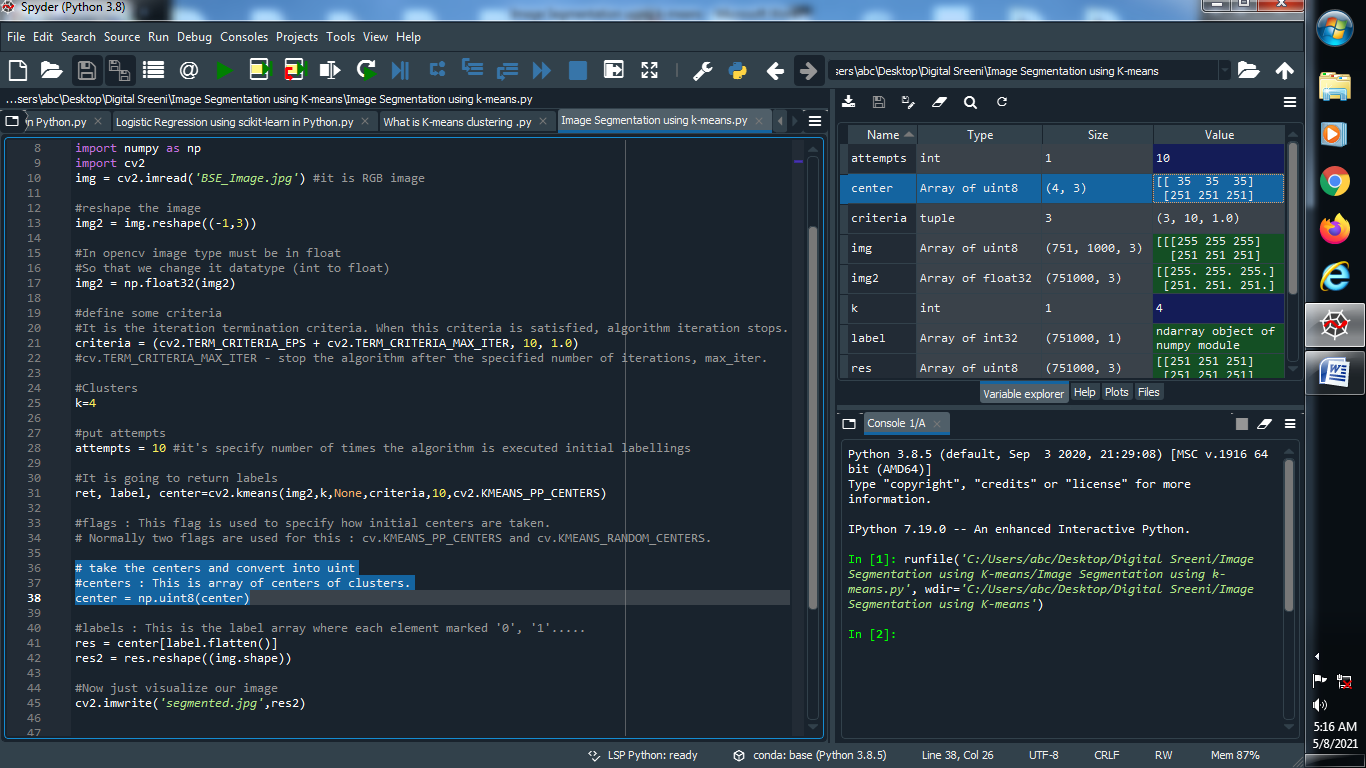
****

**Output :**

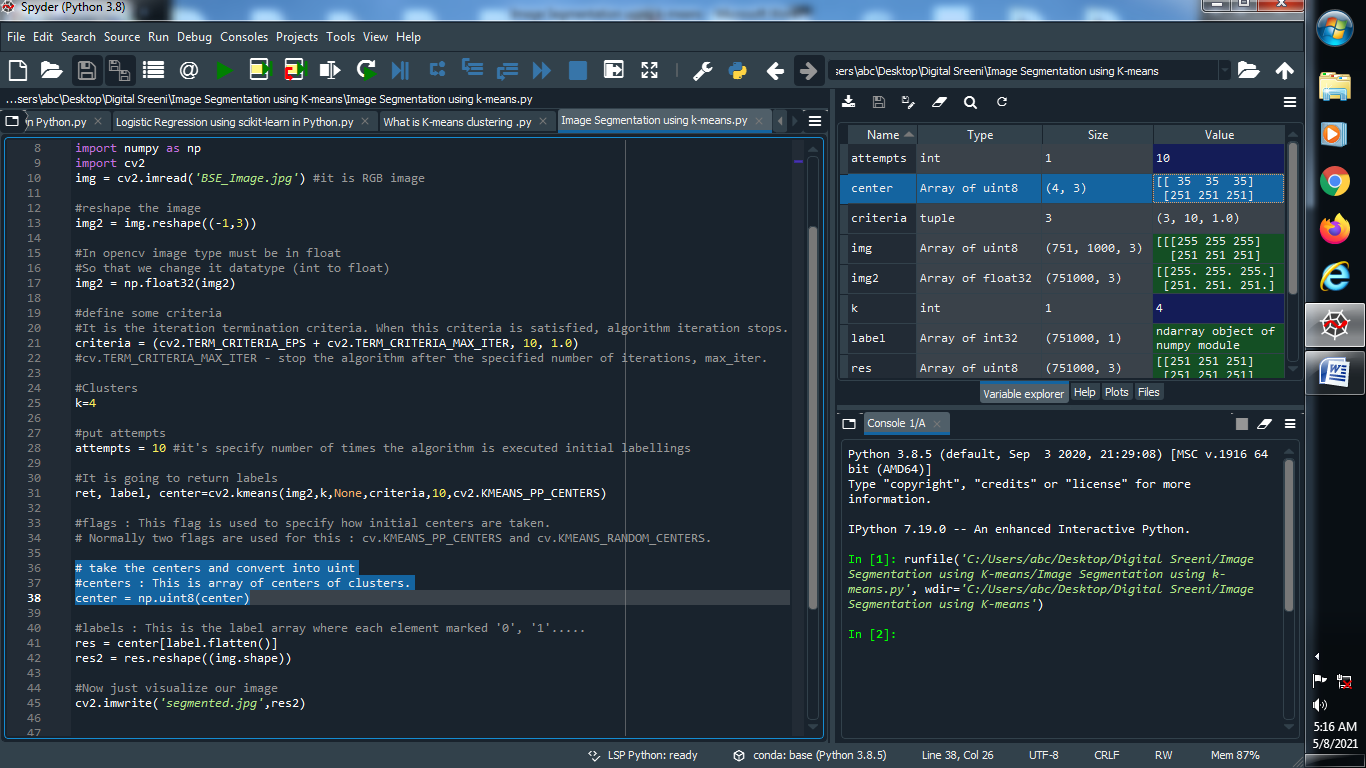
****

**(6) Assign center :**

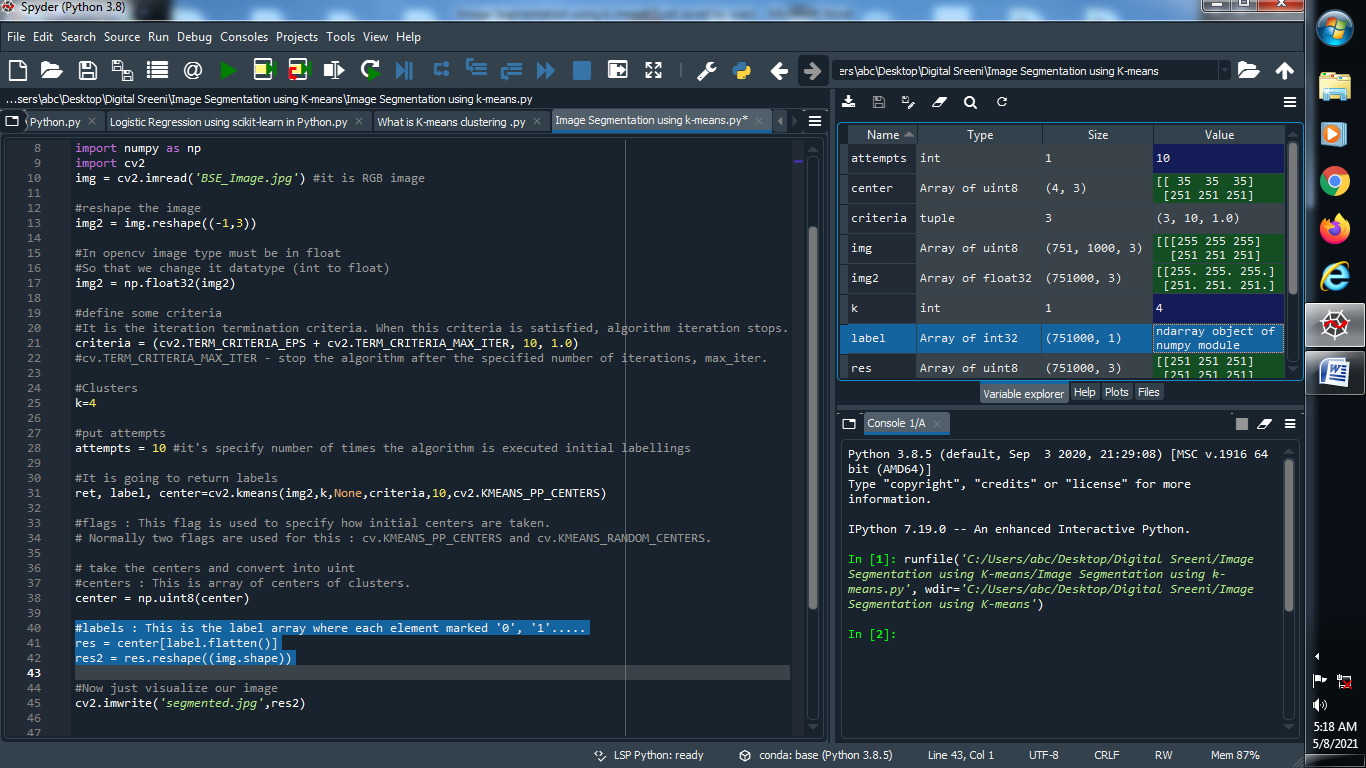
**Note : Center means it is the array of centers of clusters.**

****

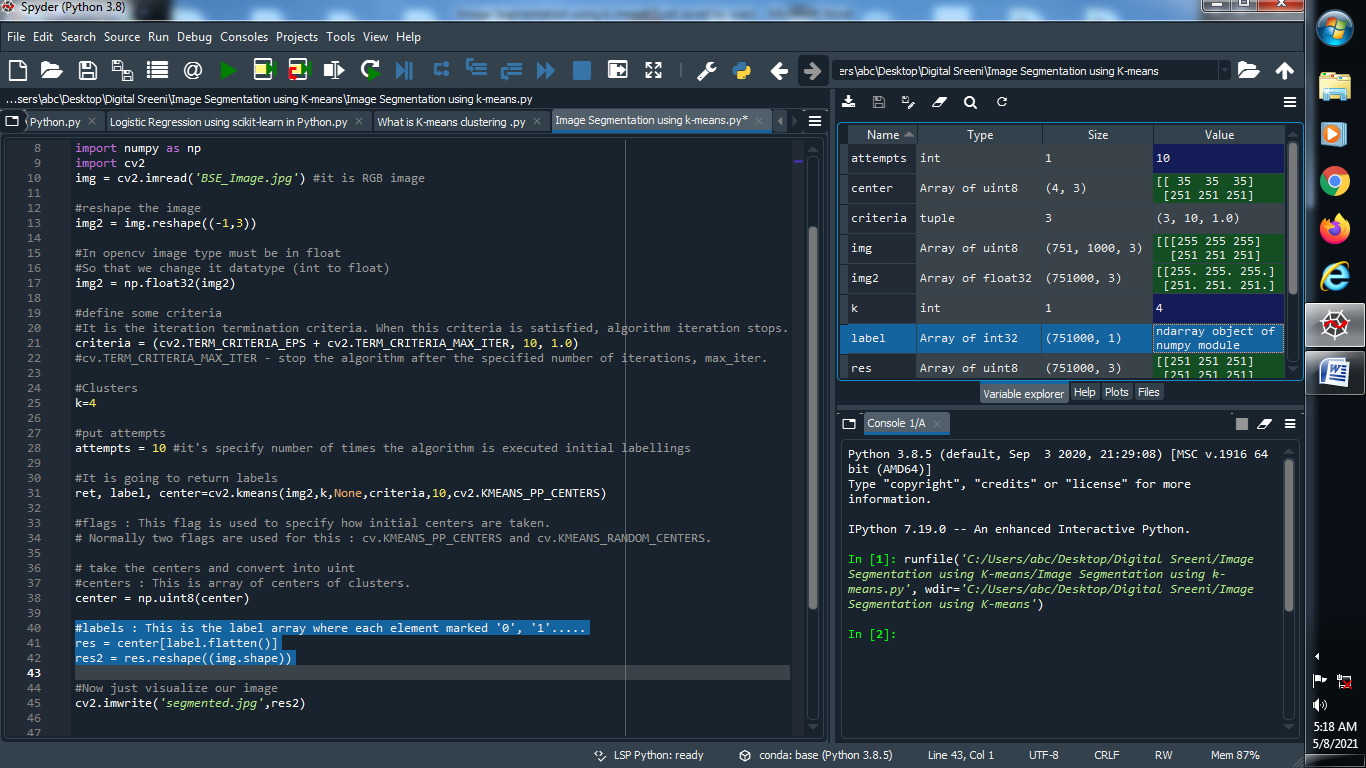
**Output :**

****

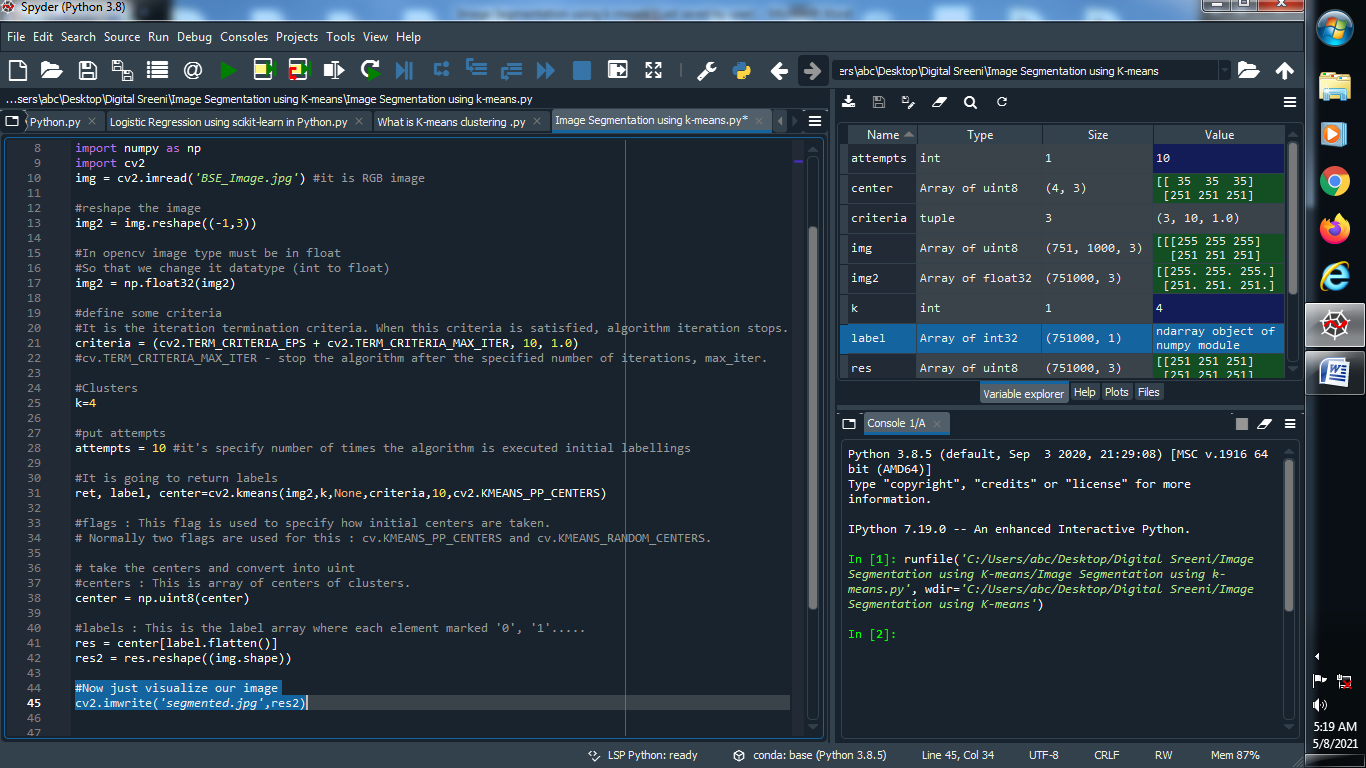
**(7) Assign label and reshape our image :**

**]**

**Output :**

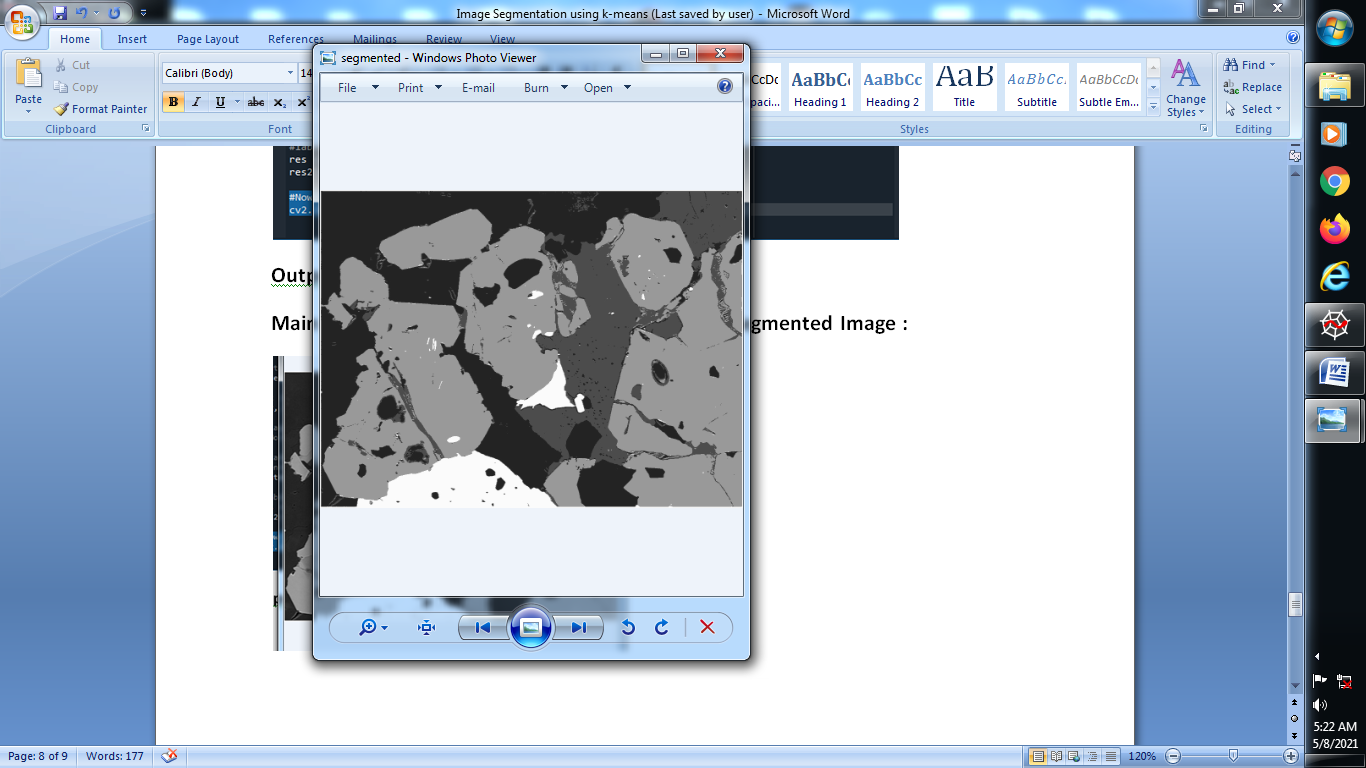
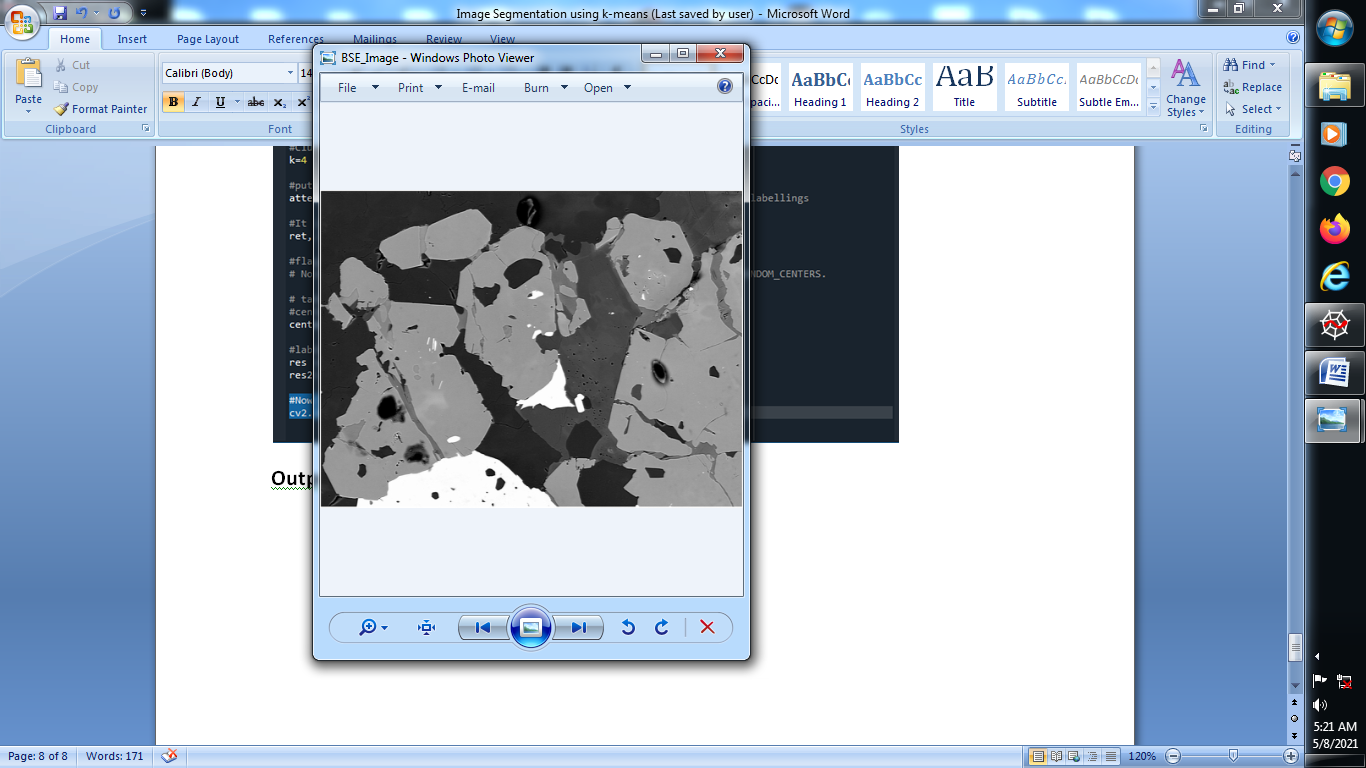
****

**(8) Now visualize our segmented image :**

****

**Output :**

**Main Image : Segmented Image :**

****