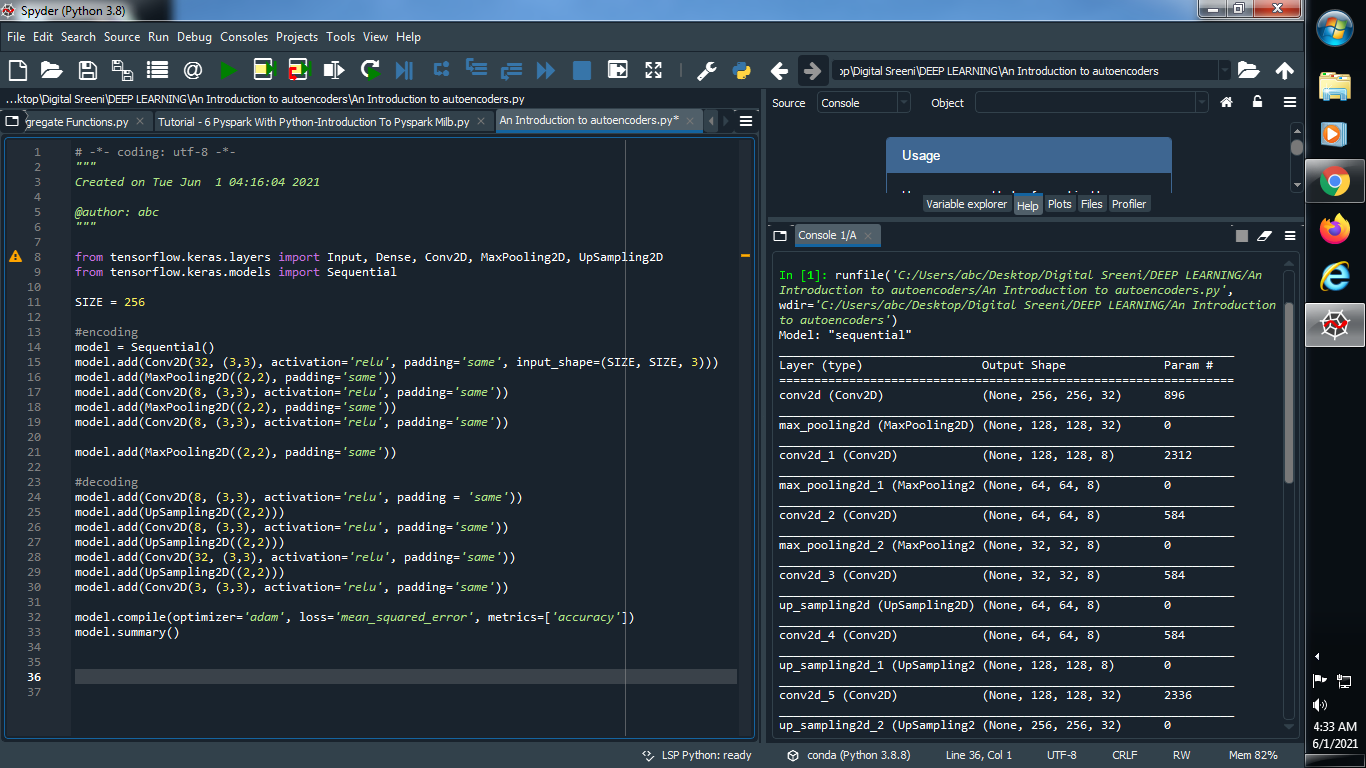
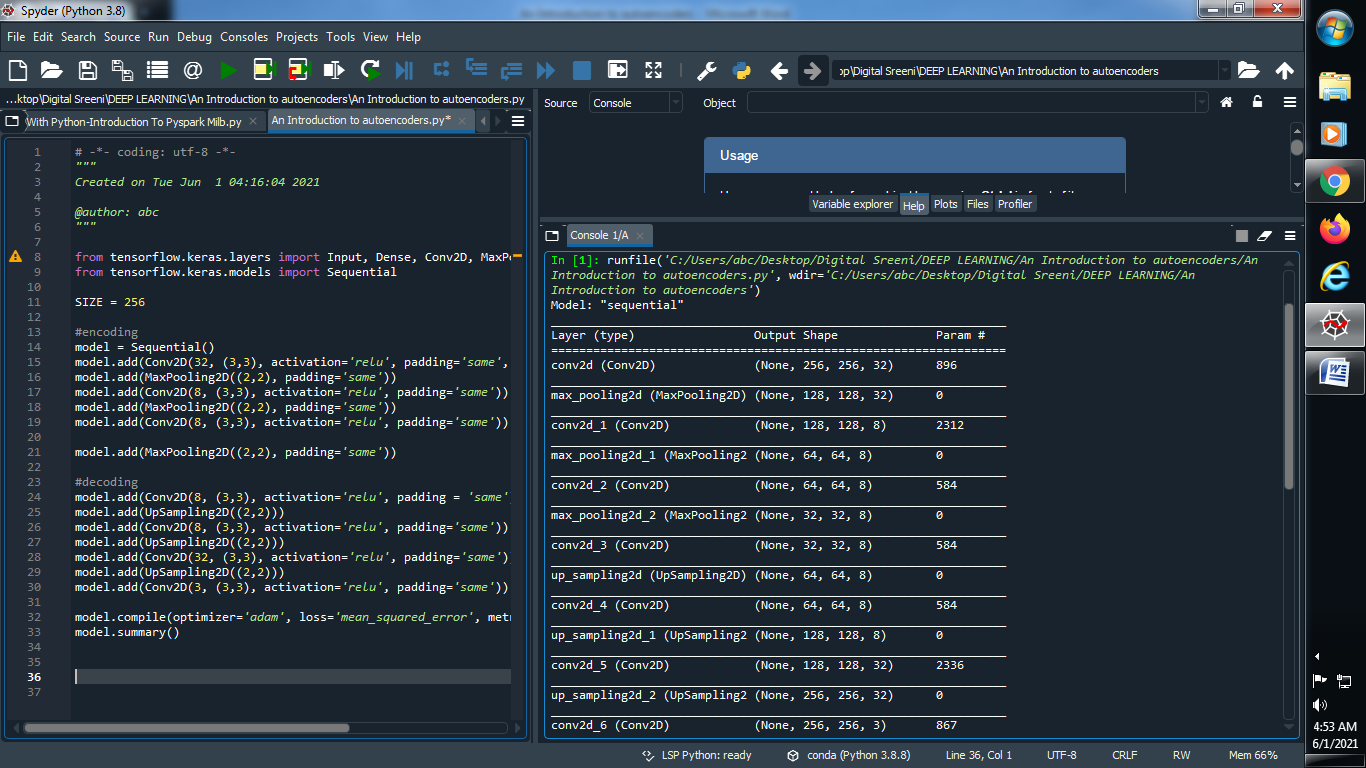
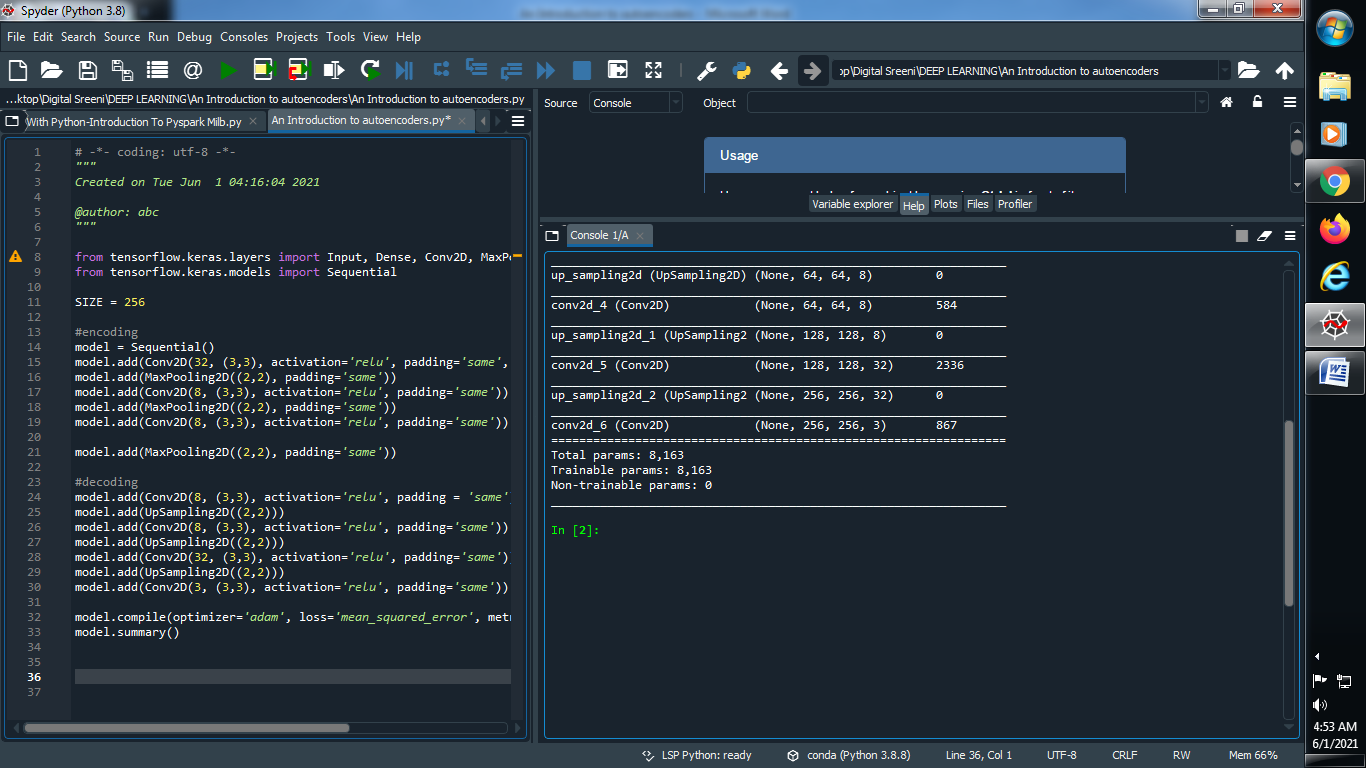
**→ Auto Encoders :**

**(1) Auto encoders main algo :**

****

**Output :**

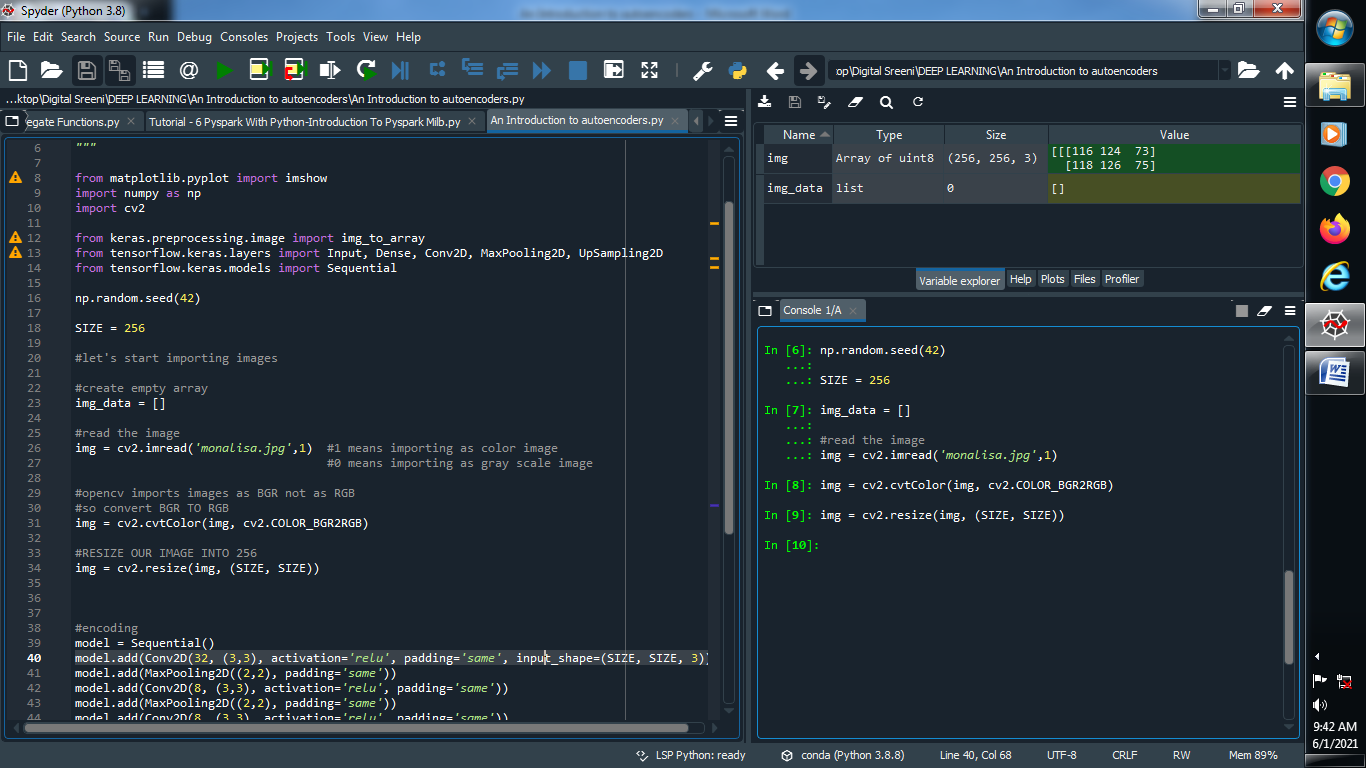
****

****

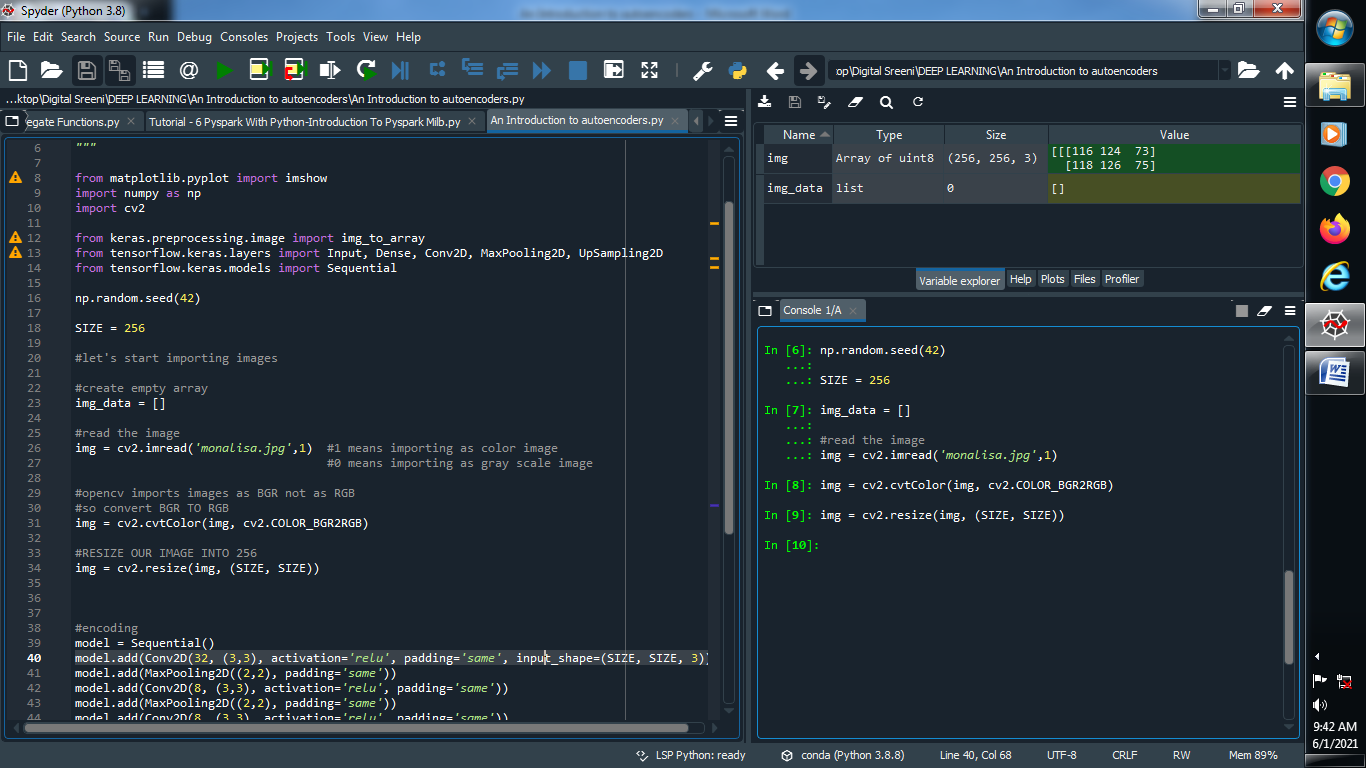
**#############################################################################**

**→Perform auto encoders :**

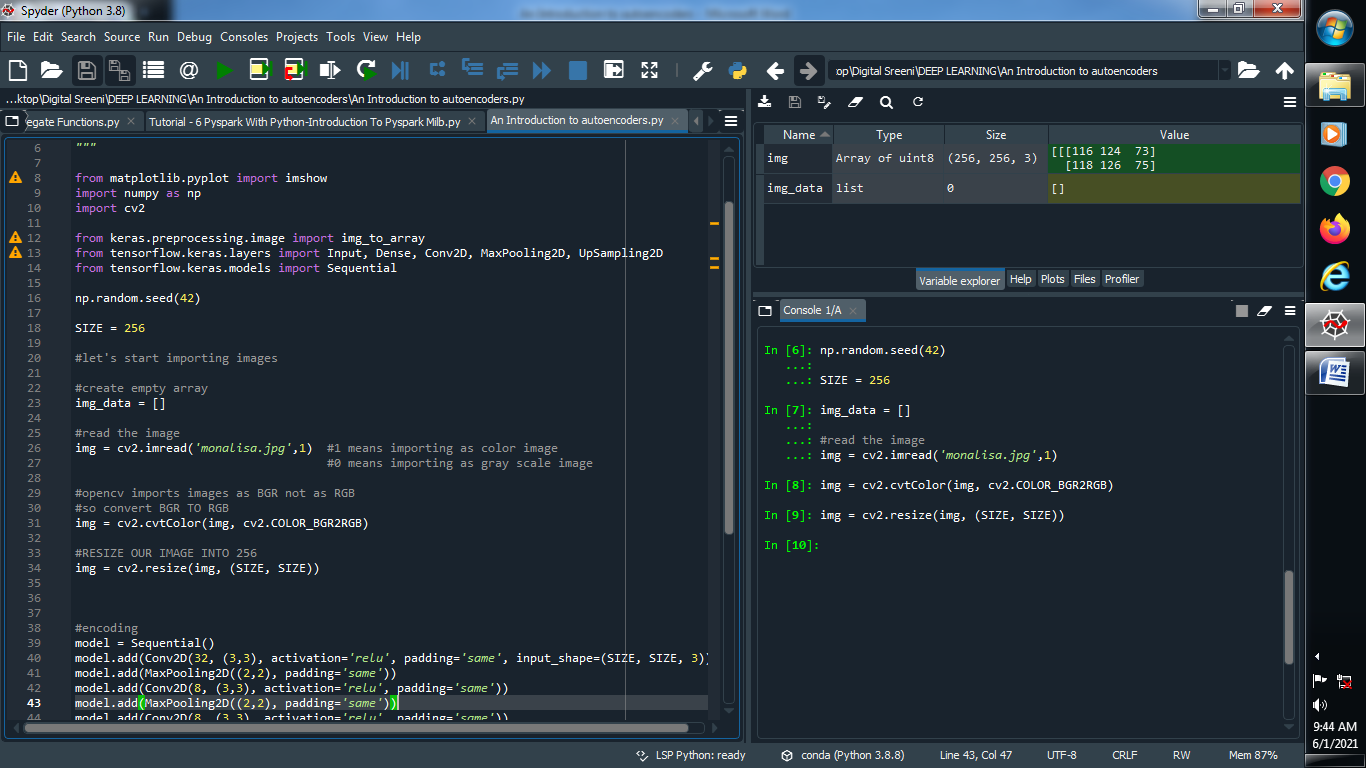
**(1) Import required library :**

****

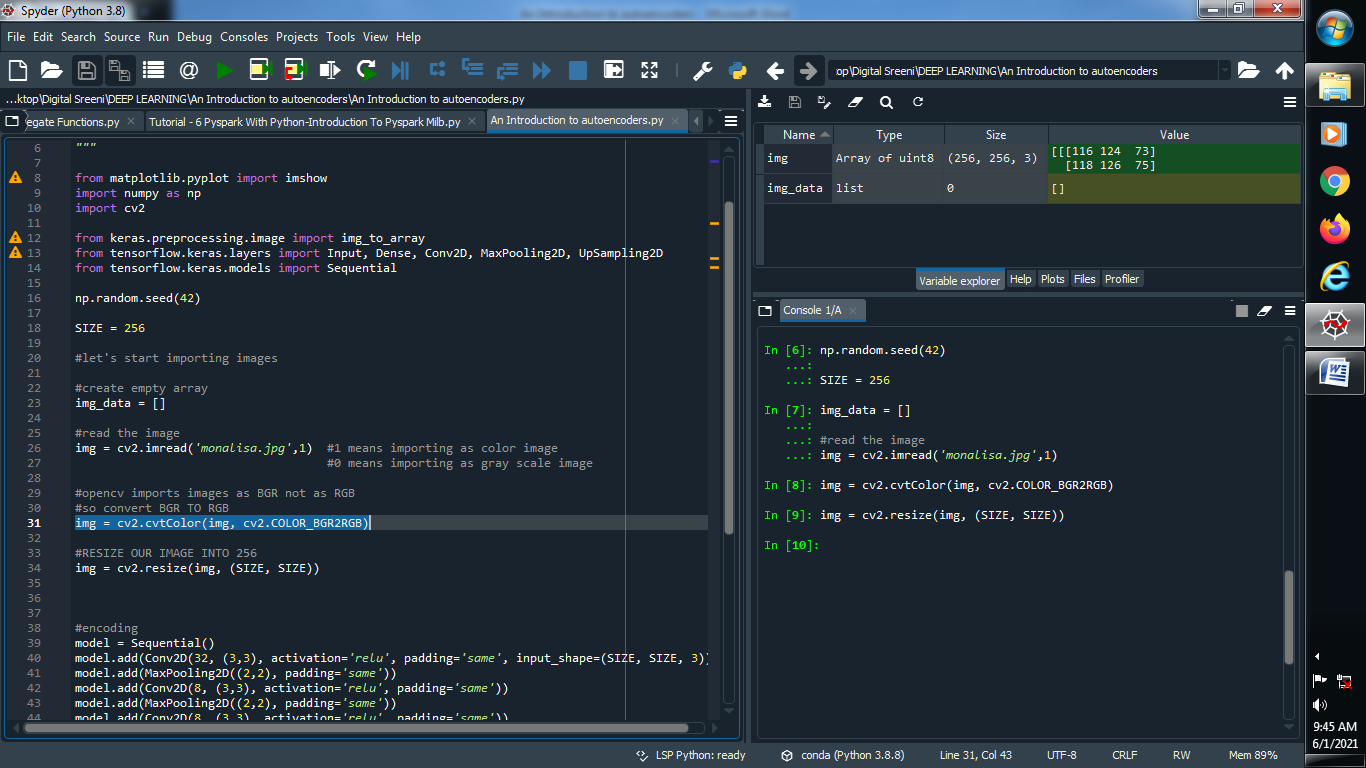
**(2) Define random seed and size :**

****

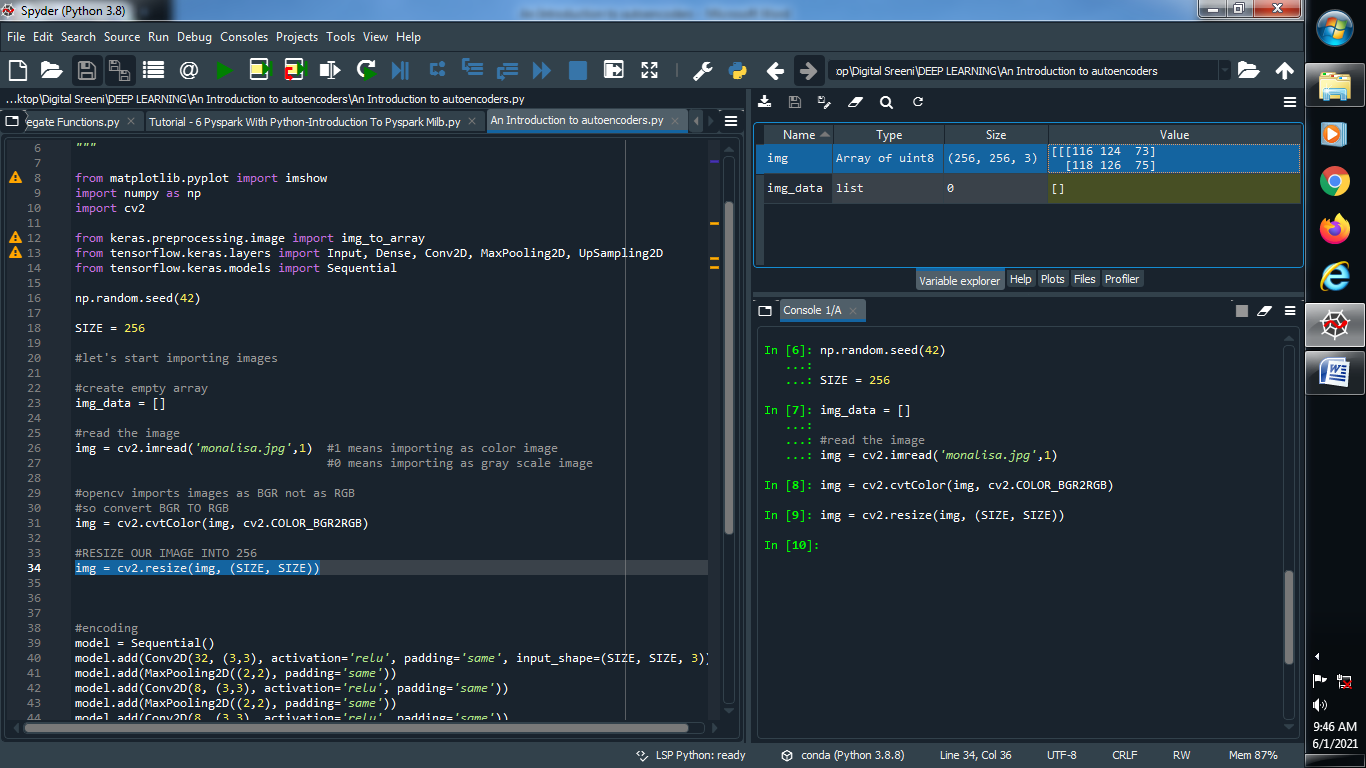
**(3) Create an empty array for importing images and read our image :**

****

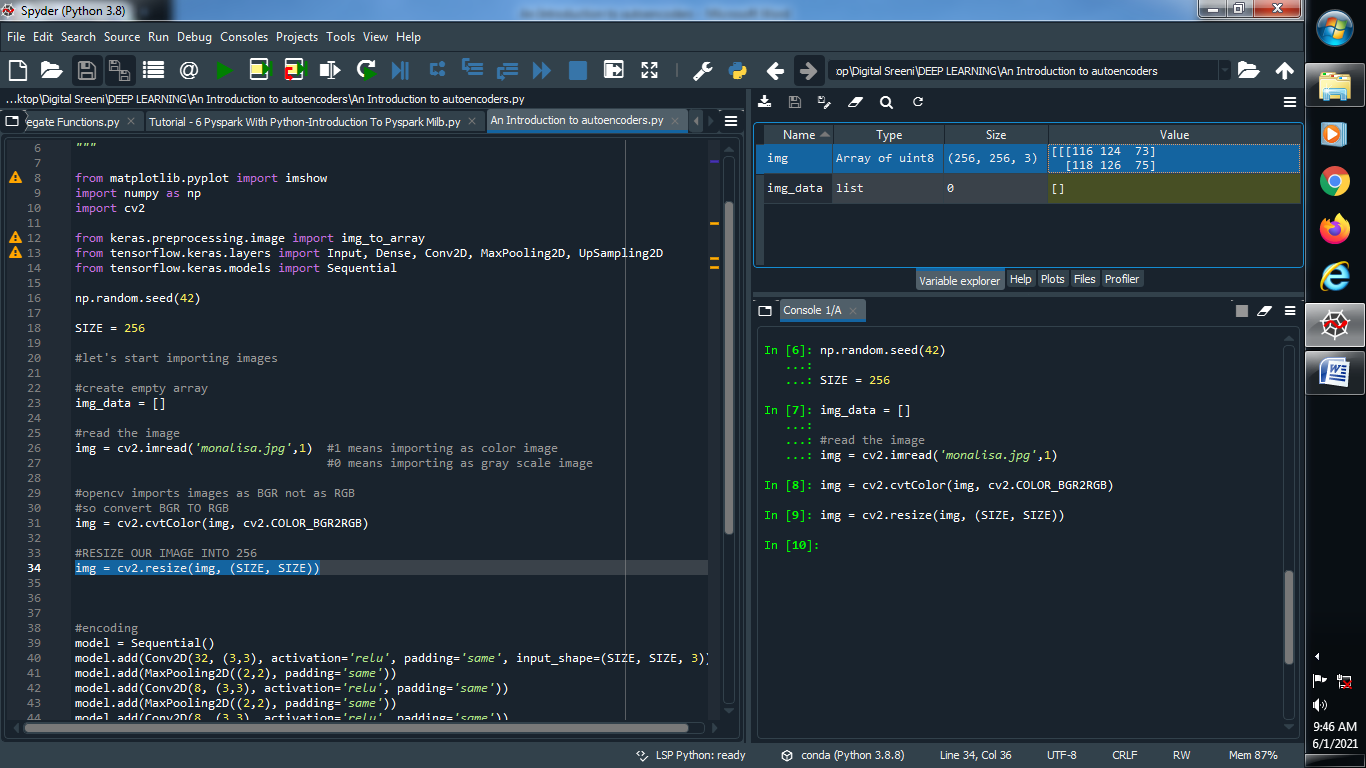
**(4) Convert BGR image into RGB image :**

****

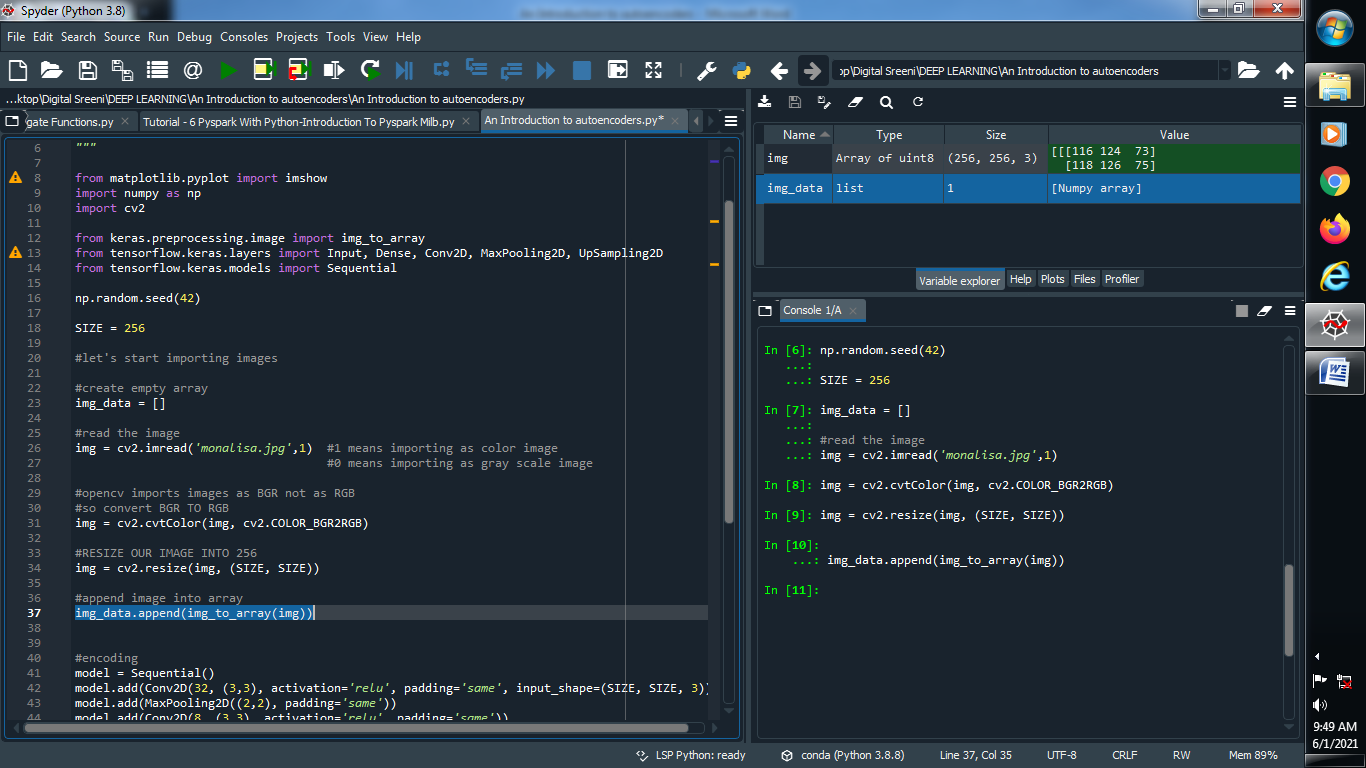
**(5) Resize our image :**

****

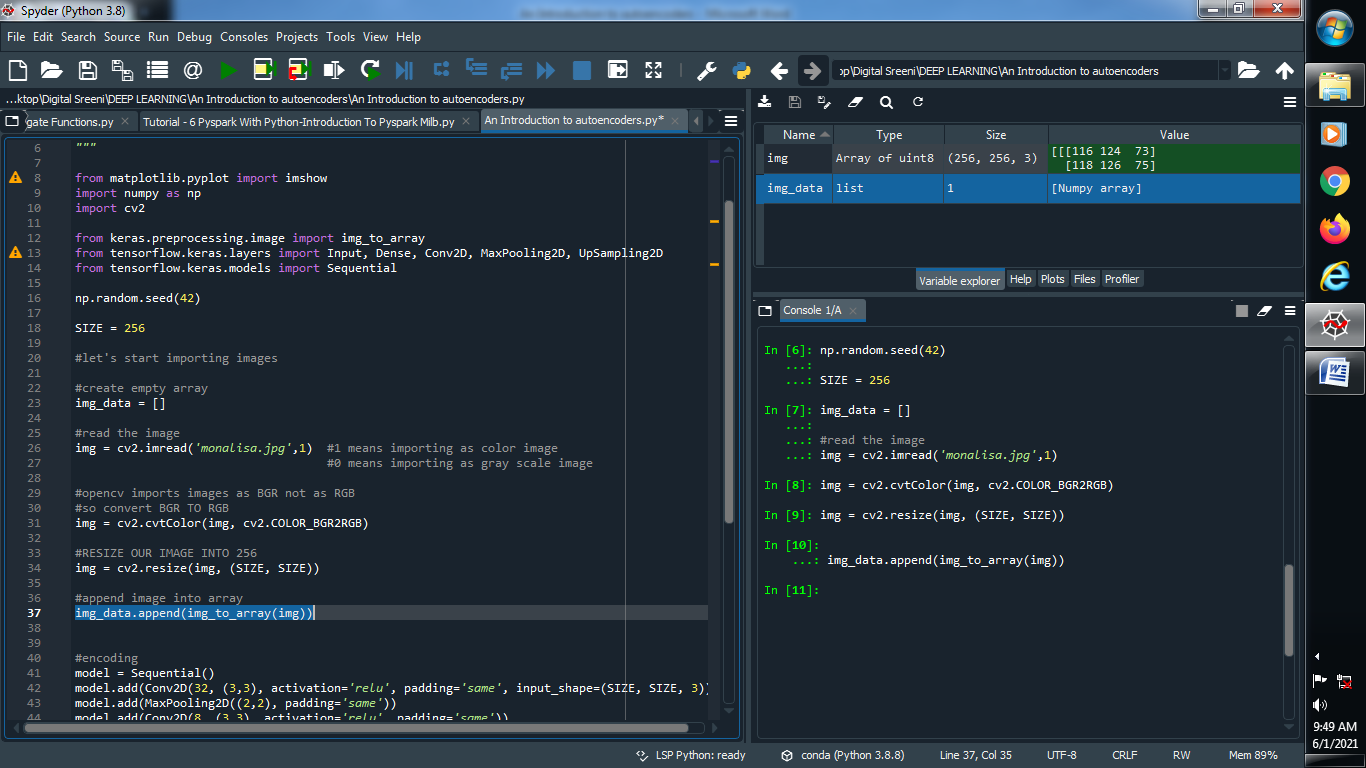
**Output :**

****

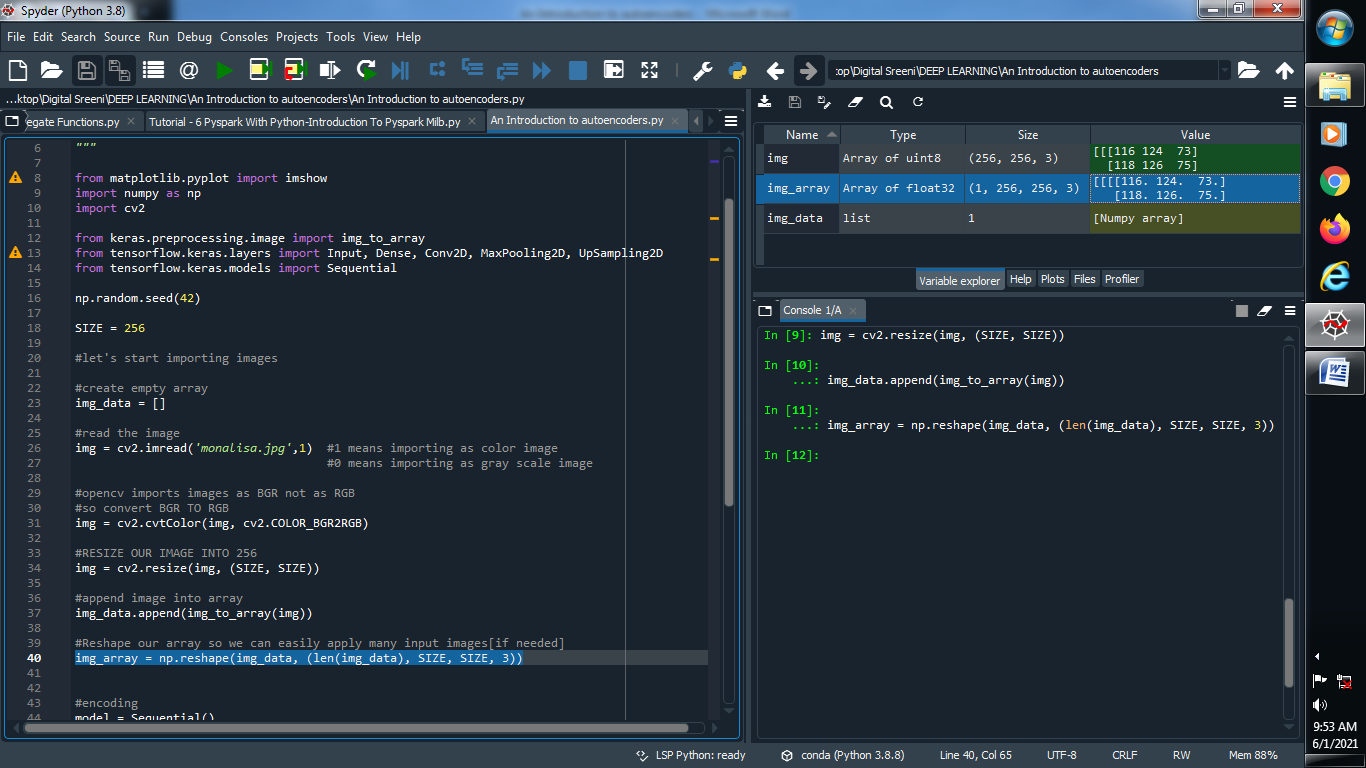
**(6) Add image into array :**

****

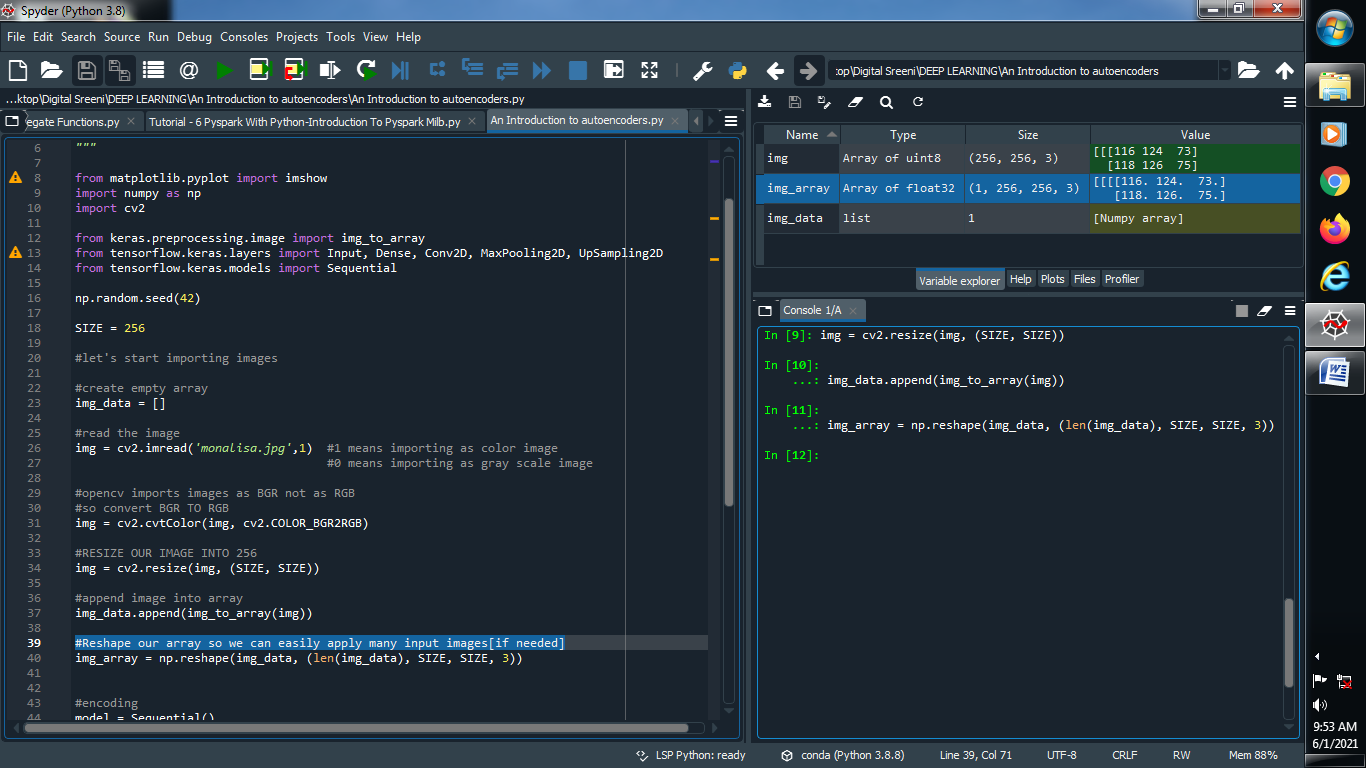
**Output :**

****

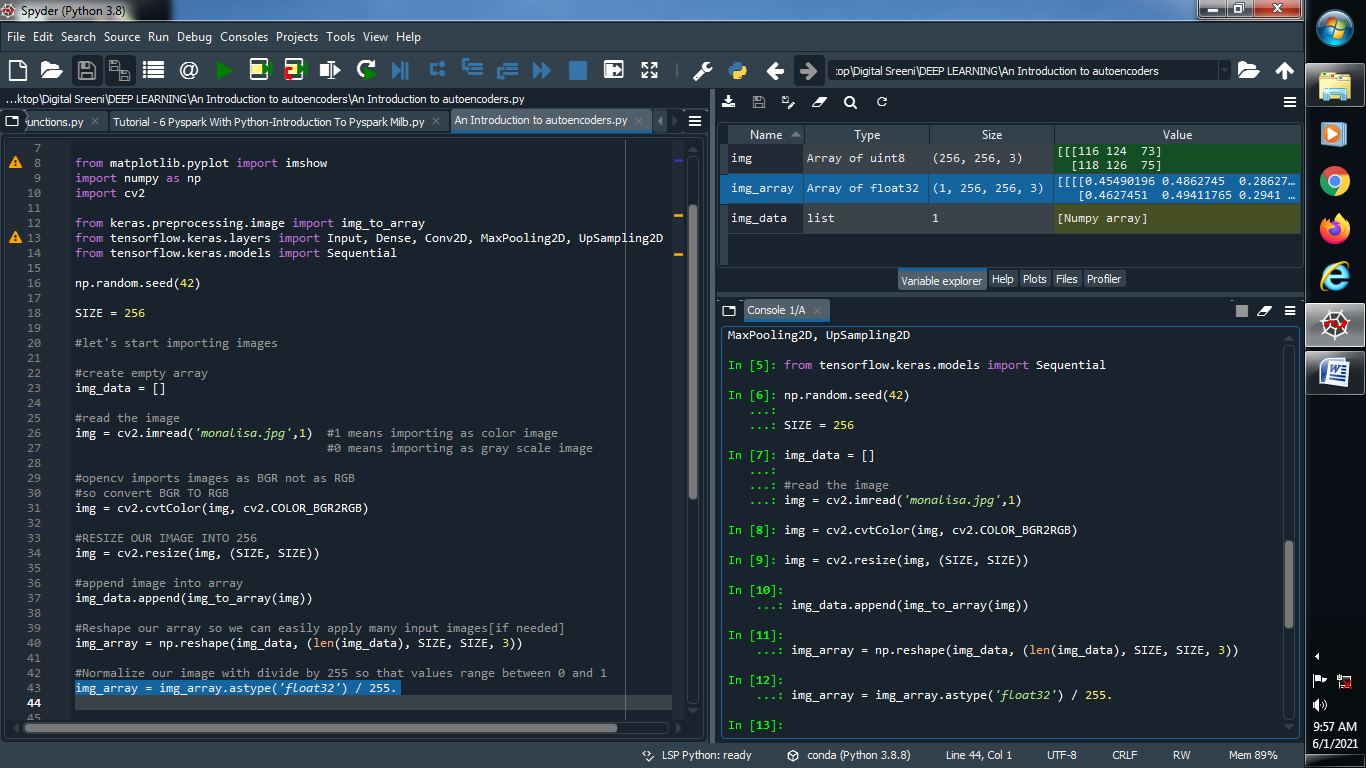
**(7) Reshape our array so we can easily apply many input images[if needed]**

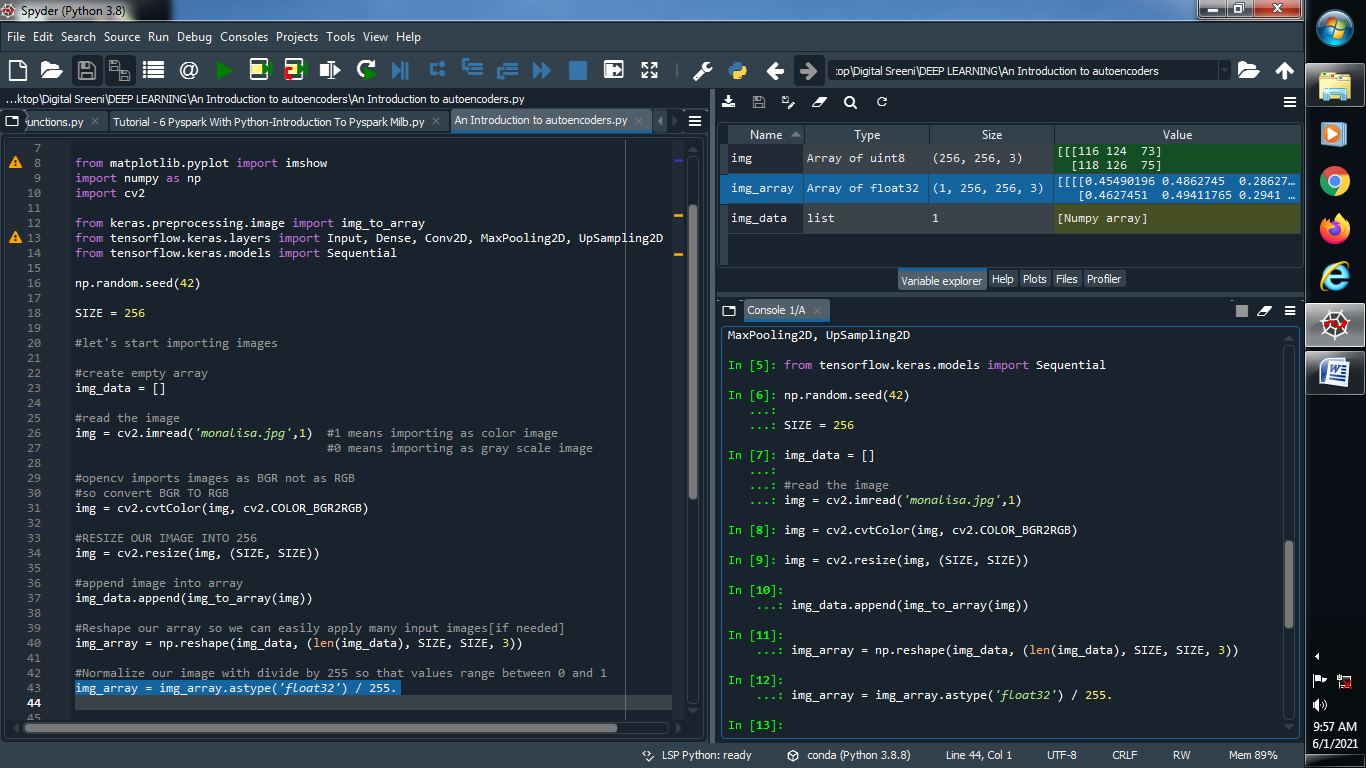
****

**Output :**

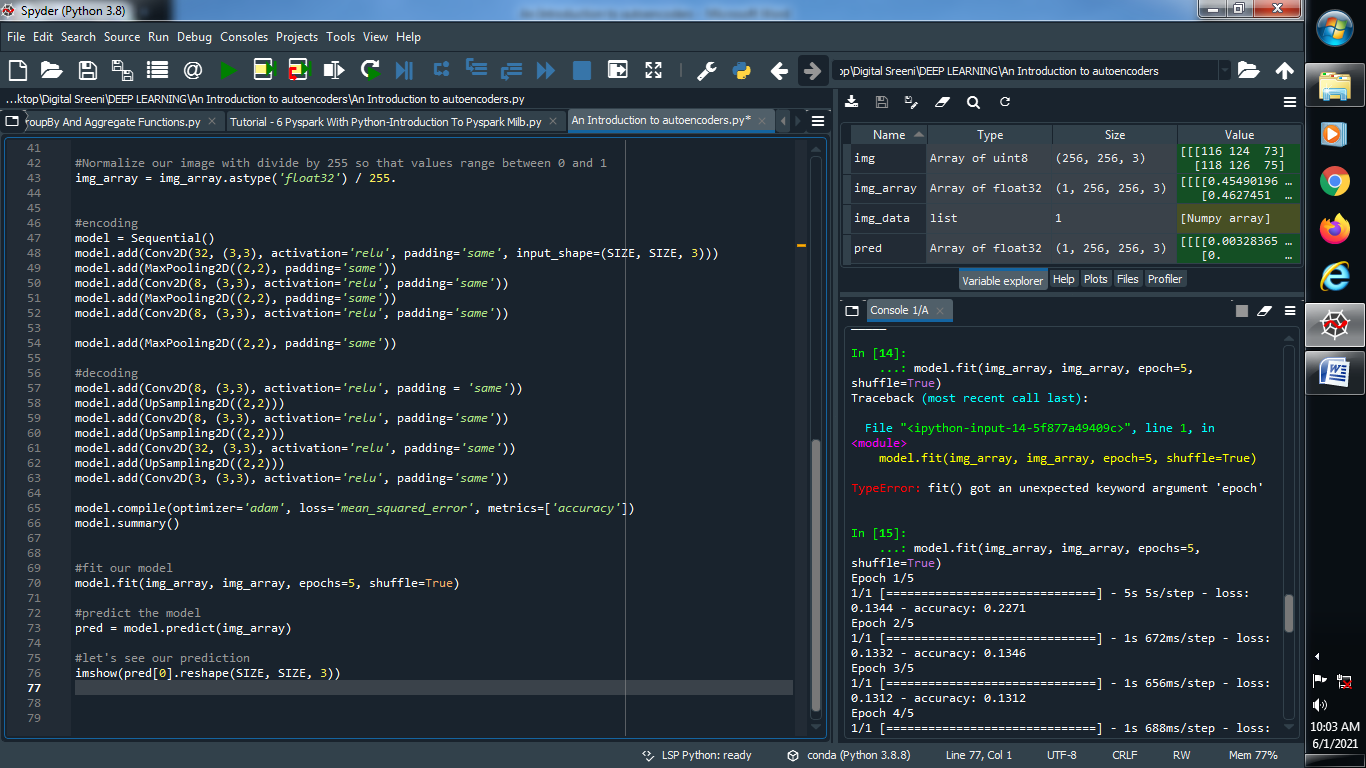
****

**(8) Normalize our image with divide by 255 so that values range between 0 and 1 :**

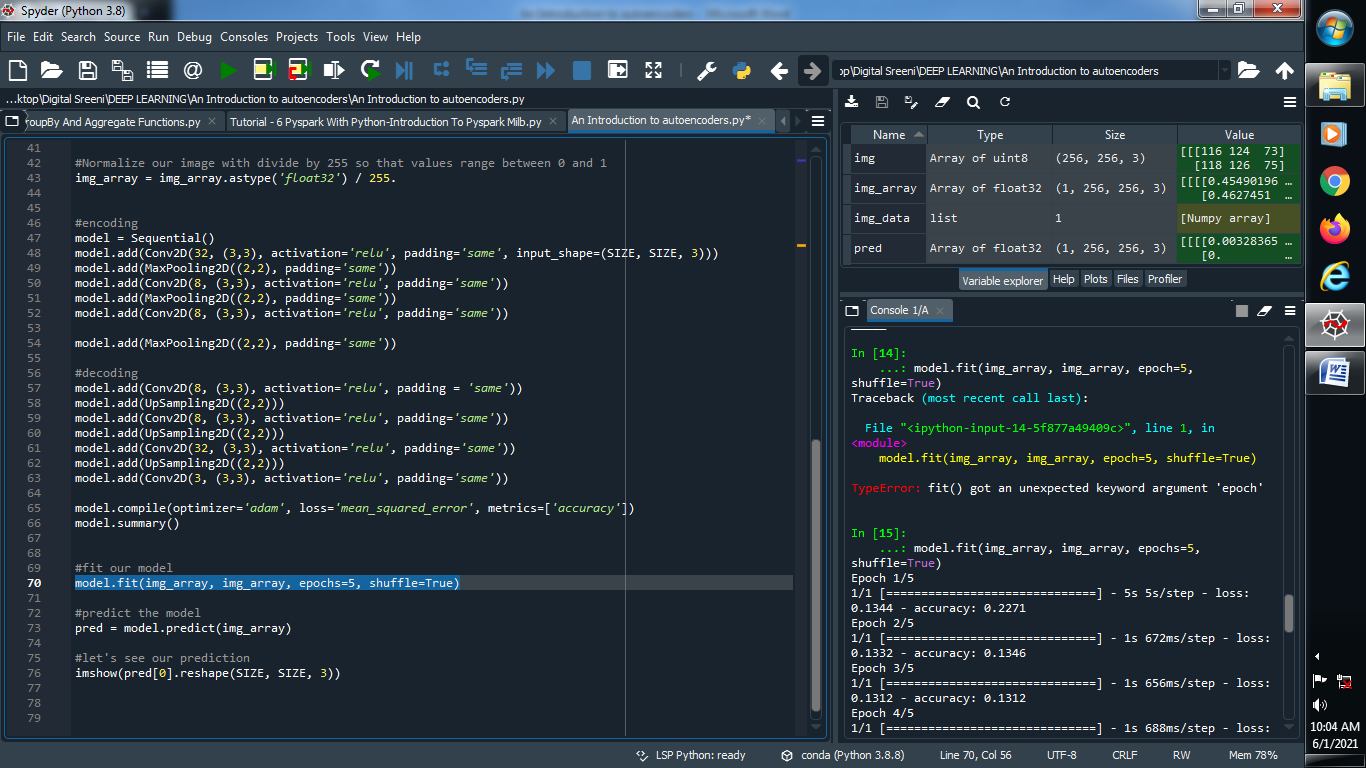
****

****

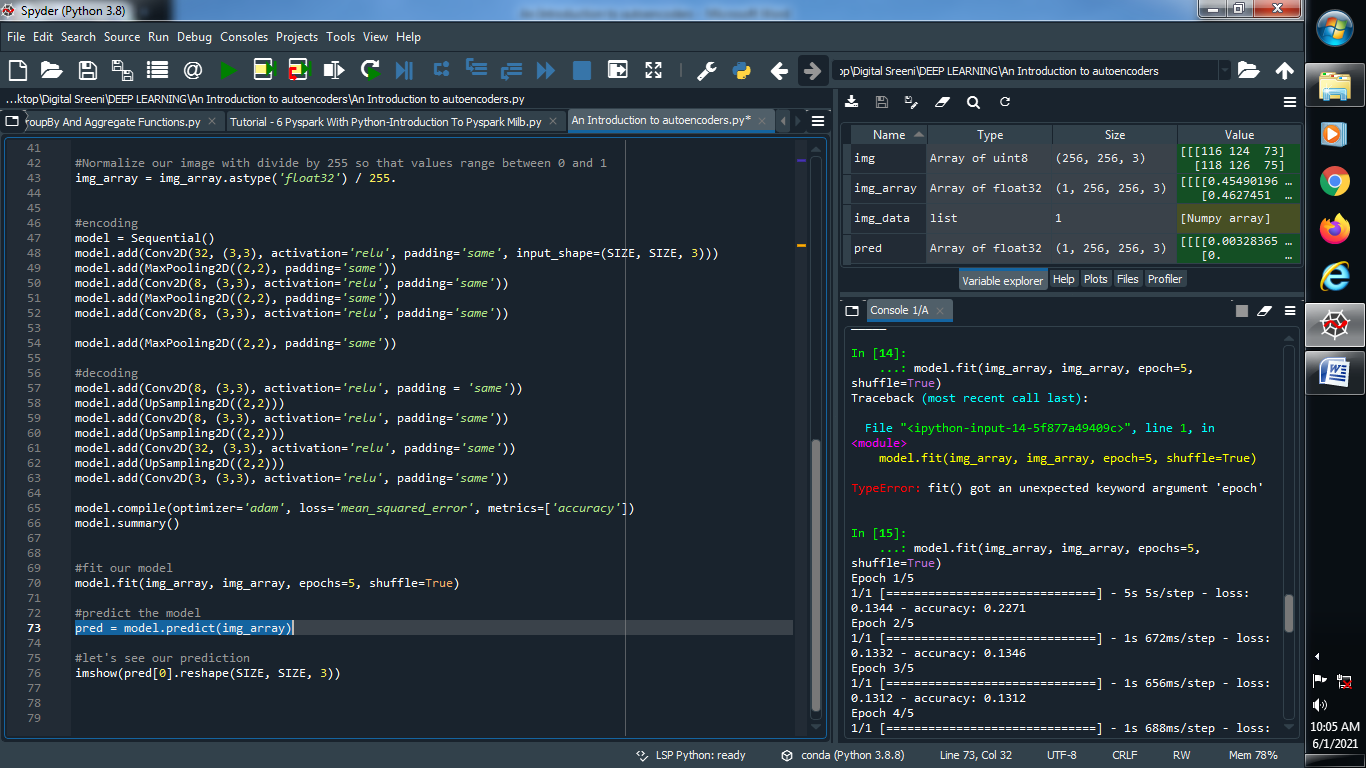
**(9) Encoding and decoding our model :**

****

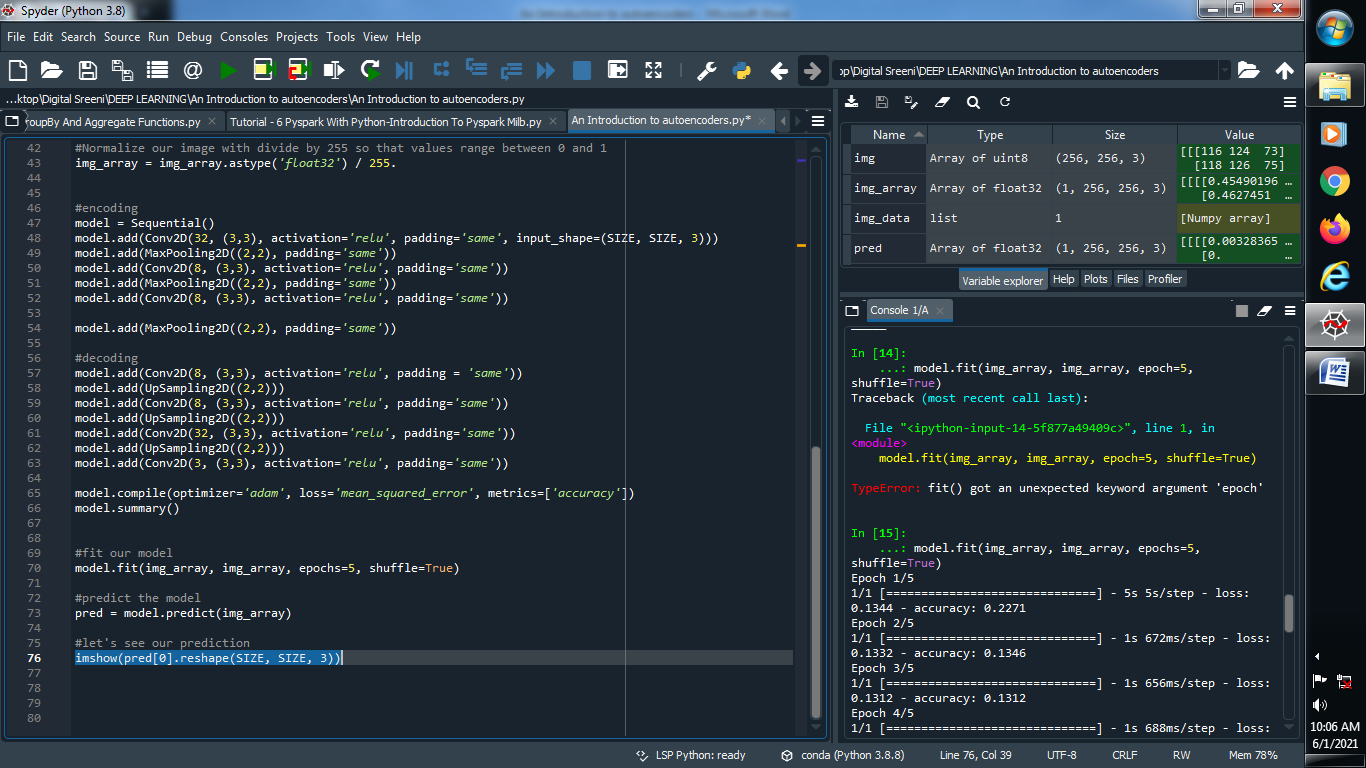
**(10) Fit our model :**

****

**(11) Predict our model :**

****

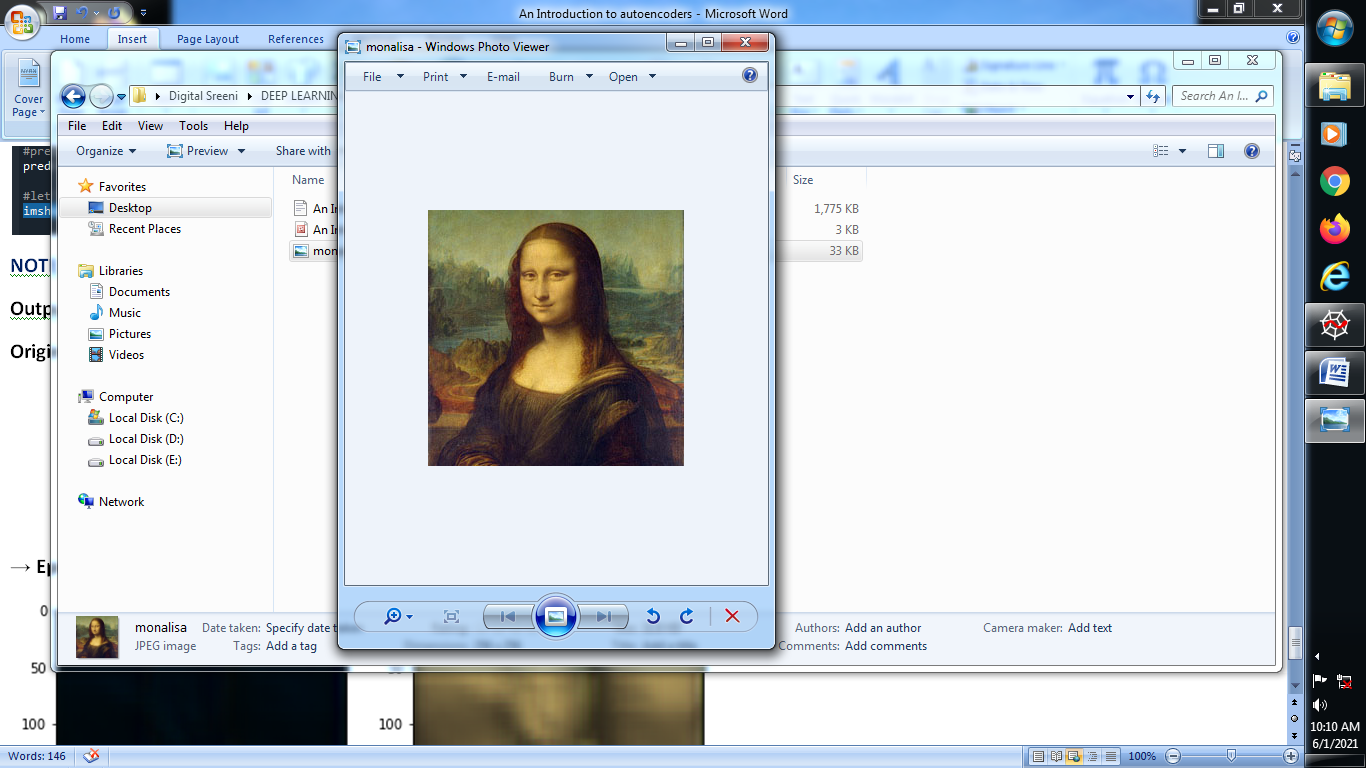
**(12) Let’s see our prediction using imshow :**

****

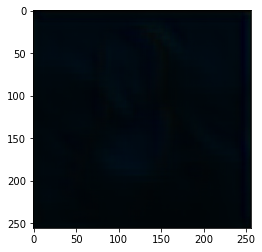
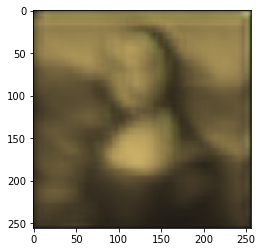
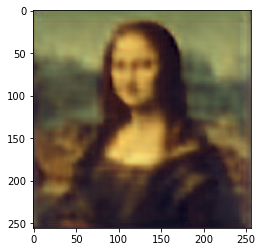
**NOTE : INCREASE NUMBER OF EPOCHS == IMAGE WITH GOOD VISUALIZATION**

**Output :**

**Original Image :**

****

**→ Epochs = 5 → Epochs = 50 →Epochs = 500**

**  **