CS 6375
Assignment 4:

Names of students in your group:
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Number of free late days used: **0**
Note: You are allowed a total of 4 free late days for the entire semester.
You can use at most 2 for each assignment. After that, there will be a
penalty of 10% for each late day.

Please list clearly all the sources/references that you have used in this
assignment.
References:
References provided in question

Part 3-1:

1. The code is developed in Python.
2. Run code in the format:
   python Part3_1.py image1.jpg image2.jpg image3.jpg image4.jpg image5.jpg
3. The image outputs are present in the quantizedImages folder.

Image	Original File Size(jpg)	Value of K	Image Size(jpeg)	Image Quality
Image1	355KB	5	622KB	Extremely Blurred
Image1	355KB	10	697KB	Clearer than k=5
Image1	355KB	15	711KB	Color divisions more prominent
Image2	537KB	5	721KB	Extremely Blurred
Image2	537KB	10	773KB	Clearer than k=5
Image2	537KB	15	785KB	Color divisions more prominent
Image3	598KB	5	937KB	Extremely Blurred
Image3	598KB	10	1001KB	Clearer than k=5
Image3	598KB	15	1002KB	Color divisions more prominent
Image4	253KB	5	87KB	Extremely Blurred
Image4	253KB	10	118KB	Clearer than k=5
Image4	253KB	15	124KB	Color divisions more prominent
Image5	280KB	5	446KB	Extremely Blurred
Image5	280KB	10	514KB	Clearer than k=5
Image5	280KB	15	576KB	Color divisions more prominent

Result:

It can be seen that for the data used image4 worked best, and among the 3 versions of image4 the output for k=15 works best (file size decreases and image is clear)