Internship Week 2 Report

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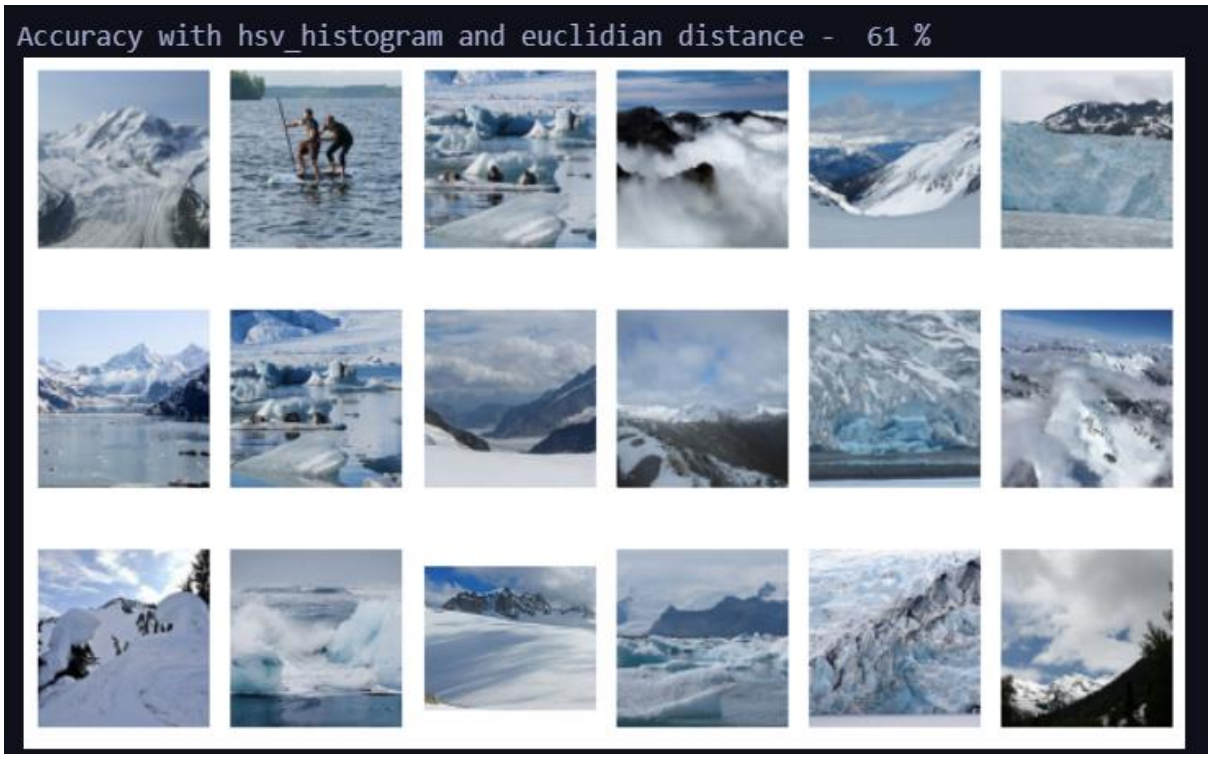
- For the week 2 of Inhouse internship under P.V Ugale mam. The task was to improve upon the technique used for image retrieval using colour features. Various histogram techniques were identified and studied which are an effective and popular way to generate image descriptors. All the techniques used give almost similar results i.e. within 5%. Global colour histogram (GHC) is a simple and computationally less expensive method as compared to others but still gives convincing results. GHC was implemented in python and K-Means algorithm was used to group similar images. Using K-Means instead of direct Euclidean distance function gave upwards of 10-15% better retrieval results.



Using colour features only for image retrieval is not sufficient as we can see in above image. Colour similarities alone are not enough to identify and object. The next major attribute of object is its shape. The next task is to extract shape features from the images and use it for retrieval

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Accuracy with hsv_histogram and Kmeans -  78
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