**README**

**How to Execute?**

1. Open the folder.
2. Run ‘Phase3\_Task1.m’ file.
3. Enter the information asked in the program correctly as per the instructions.
4. Select the number of dimensions into which you want to reduce the data.

**Input:**

Input would be the number of dimensions you want your data to reduce into.

**Output-**

There would be two outputs for this.

First is the new vector space with all the data points changed as per new dimensions as ‘Sift\_New\_Dimensions.txt’

Second is the file for new dimensions in terms of the original dimensions. It also has the score of the original dimensions. Score denote the contribution of the original dimension that is there in the new dimensions. It can be positive, negative or zero depending upon the direction of the new dimension with respect to the original dimensions as ‘Sift\_Reduced\_Formatted.txt’.