**Steps to execute Common&Cluster-cdr3s-V2.6. Rmd**

1. Download Input-CommonCDR3 folder, Common&Cluster-cdr3s-V2.6. Rmd and Cluster-Result.csv from <https://github.com/bhindia/Project_Results>

2. Save those files in a location and get the path of Input-CommonCDR3 folder and Cluster-Result.csv. Change PATH and PATH2 variables in .rmd file.

3. Create an output folder for saving output files. Get that location and change PATH1 variable in .rmd file

4. Run .rmd file

5. Output files and heatmaps will be saved into your output folder.

**Steps to execute kmeans.ipynb**

1. Download Cluster-Data.tsv file from <https://github.com/bhindia/Project_Results>

2. Save that file in a location and update that path while reading the file in the kmeans.ipynb program. Also, change the path of output file where it needs to be saved.

3. Run kmeans.ipynb and output file will be available in the respective folder.