Assignment 3

Machine Learning (**CS564**)

Department of CSE, IIT Patna

Date:- 13-Sep-2019 **Deadline:-**21/09/2019

Instructions:

1. Markings will be based on the correctness and soundness of the outputs. Marks will be deducted in case of plagiarism.
2. Proper indentation and appropriate comments (if necessary) are mandatory.
3. You should zip all the required files and name the zip file as ***roll_no_of_all_group_members*.zip**, eg. **1501cs11_1201cs03_1621cs05.zip.**
4. Upload your assignment (**the zip file**) in the following link:
   https://www.dropbox.com/request/BGhibCkCcr7SQdfiS4tc

For any queries regarding this assignment contact:

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Dataset:

1. "Diabetes.arff" file contains the dataset.
2. Each row has 9 comma separated values where first 8 values represent a single datapoint (8 dim vector values). **Ignore the 9th value.**

Questions:

There are two parameters in DBSCAN algorithm:

a. Eps: radius length
b. minPts: minimum number of points required to form a cluster.

1. Implement DBSCAN algorithm and find number of clusters formed for eps = 2 and minPts = 5
2. For any one cluster, show its core point and border points.