# Assignment 6 Machine Learning CS 6375.501

## Dharmam Buch DSB150030

### 1. Copy all the files to a folder, lets say name of this folder is "Assignment\_6\_DSB150030"

### 2. Shift+Right Click in the folder and "Open command prompt here"!

### Alternatively, you can use cd command.

### 3. Set path of R in current directory in command prompt by using link of your r bin. ex-

### C:\Users\Dharmam\Desktop\Assignment\_6\_DSB150030>Path C:\Program Files\R\R-3.2.3\bin

### 4. Level 1 run using following command as required the command args are <k>, <input file>, <output file>. ex-

### C:\Users\Dharmam\Desktop\Assignment\_6\_DSB150030>Rscript --vanilla DSB150030\_Part1.R 5 test\_data.txt outputLevel1.txt

|  |  |  |
| --- | --- | --- |
| **Value of K** | **SSE** | **Cluster** |
| 5 | 1.01392952941176 | 1- 35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54  2- 77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100  3- 17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34  4- 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16  5- 55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76 |
| 3 | 1.91022921875 | 1- 67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100  2- 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33  3- 34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66 |
| 7 | 1.16367025 | 1- 35,36,37,38,39,40,41,42,43,44,45,46,47,48,49  2- 22,23,24,25,26,27,28,29,30,31,32,33,34  3- 11,12,13,14,15,16,17,18,19,20,21  4- 1,2,3,4,5,6,7,8,9,10  5- 83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100  6- 66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82  7- 50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65 |
| 9 | 1.03986369230769 | 1- 89,90,91,92,93,94,95,96,97,98,99,100  2- 1,2,3,4,5,6,7,8,9  3- 19,20,21,22,23,24,25,26,27,28,29  4- 10,11,12,13,14,15,16,17,18  5- 68,69,70,71,72,73,74,75,76,77,78  6- 79,80,81,82,83,84,85,86,87,88  7- 56,57,58,59,60,61,62,63,64,65,66,67  8- 30,31,32,33,34,35,36,37,38,39,40,41,42  9- 43,44,45,46,47,48,49,50,51,52,53,54,55 |