CS 6375
ASSIGNMENT - 3

Names of students in your group:

Anirudh Thakur (NetID -axt190073)

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Number of free late days used: 0

Note: You are allowed a **total** of 4 free late days for the **entire semester**. You can use at most 2 for each assignment. After that, there will be a penalty of 10% for each late day.

PART 2

Learning rate – 0.01

Value of K	SSE	Size of each cluster
5	1252.59	Size of cluster 1 : 441 Size of cluster 2 : 268 Size of cluster 3 : 70 Size of cluster 4 : 351 Size of cluster 5 : 265
10	1202.04	Size of cluster 1 : 155 Size of cluster 2 : 138 Size of cluster 3 : 31 Size of cluster 4 : 166 Size of cluster 5 : 175 Size of cluster 6 : 101 Size of cluster 7 : 177 Size of cluster 8 : 52 Size of cluster 9 : 129 Size of cluster 10 : 9 Size of cluster 11 : 11 Size of cluster 12 : 51 Size of cluster 13 : 129 Size of cluster 14 : 26 Size of cluster 15 : 45

15	1167.57	Size of cluster 1 : 73
		Size of cluster 2 : 109
		Size of cluster 3 : 19
		Size of cluster 4 : 116
		Size of cluster 5 : 115
		Size of cluster 6 : 79
		Size of cluster 7 : 101
		Size of cluster 8 : 27
		Size of cluster 9 : 103
		Size of cluster 10 : 5
		Size of cluster 11 : 11
		Size of cluster 12 : 30
		Size of cluster 13 : 93
		Size of cluster 14 : 19
		Size of cluster 15 : 30
		Size of cluster 16 : 32
		Size of cluster 17 : 48
		Size of cluster 18 : 54
		Size of cluster 19 : 61
		Size of cluster 20 : 20
		Size of cluster 21 : 21
		Size of cluster 22 : 37
		Size of cluster 23 : 11
		Size of cluster 24 : 25
		Size of cluster 25 : 32
		Size of cluster 26 : 12
		Size of cluster 27 : 15
		Size of cluster 28 : 23
		Size of cluster 29 : 38
		Size of cluster 30 : 36

20	1113.16	Size of cluster 1 : 45
		Size of cluster 2 : 44
		Size of cluster 3 : 13
		Size of cluster 4 : 73
		Size of cluster 5 : 78
		Size of cluster 6 : 42
		Size of cluster 7 : 58
		Size of cluster 8 : 14
		Size of cluster 9 : 80
		Size of cluster 10 : 4
		Size of cluster 11 : 7
		Size of cluster 12 : 10
		Size of cluster 13 : 56
		Size of cluster 14 : 12
		Size of cluster 15 : 24
		Size of cluster 16 : 22
		Size of cluster 17 : 28
		Size of cluster 18 : 36
		Size of cluster 19 : 42
		Size of cluster 20 : 14
		Size of cluster 21 : 15
		Size of cluster 22 : 26
		Size of cluster 23 : 4
		Size of cluster 24 : 16
		Size of cluster 25 : 17
		Size of cluster 26 : 6
		Size of cluster 27 : 12
		Size of cluster 28 : 15
		Size of cluster 29 : 25
		Size of cluster 30 : 24
		Size of cluster 31 : 34
		Size of cluster 32 : 47
		Size of cluster 33 : 21
		Size of cluster 34 : 16
		Size of cluster 35 : 28
		Size of cluster 36 : 19