Project type	Mini Project 1
Number of members	01 (solo Project)
Marks	100% Code 60% + Viva presentation 40% *Coding efficiency will be considered while marking *If copy paste is found both student will be given zero
Submission date & time	25-4-2021 (class time)

<table>
<tr>
<td>1.</td>
<td>Write a program in C/C++/JAVA that takes n real numbers from users (separated by coma). Apply Smoothing by bin means and bins boundary techniques for smoothing those numbers. Bin size is also given as input. Take choice from user for example choice 1 means smoothing by mean, choice 2 means smoothing by boundary. See sample input output for better understanding.
<table>
<tr><th>Sample input</th><th>Sample output</th></tr>
<tr><td>4, 15, 8, 21, 21, 24, 25, 28, 34
Bin size = 3
Choice = 1</td><td>Smoothing by means
Bin 1: 9, 9, 9
Bin 2: 22, 22, 22
Bin 3: 29, 29, 29</td></tr>
<tr><td>Choice = 2</td><td>Smoothing by boundary
Bin 1: 4, 4, 15
Bin 2: 21, 21, 24
Bin 3: 25, 25, 34</td></tr>
</table>
Note: input and output format have to be maintained.</td>
<td>ID having last digit odd (0, 1, 3, 5, 7, 9)</td>
</tr>
</table>

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<tr>
<td>2.</td>
<td>Write a program in C/C++/JAVA that takes n real numbers from users (separated by coma). Apply min max, z-score and decimal scaling normalization technique depending on the user choice. You have to take new min max as input from user while you are asked for min max normalization. For example, 1 means min max, 2 means z-score and 3 means decimal scaling normalization. See sample input and output for better understanding.

<table>
<tr><th>Sample input</th><th>Sample output</th></tr>
<tr><td>100, 107, 88
Choice = 1
New min = 0
New max = 1</td><td>0.632, 1, 0</td></tr>
<tr><td>Choice = 3</td><td>0.1, 0.107, 0.88</td></tr>
</table>

Note: input and output format have to be maintained.</td>
<td>Id having last digit even (2, 4, 6, 8)</td>
</tr>
</table>