**COMSATS University Islamabad, Wah Campus**Department of Computer Science

Course : **Introduction to Data Science** Total Marks : **10**

Class : **SE-7**  Dated : **20/09/2023**

Semester: **FALL 2023 Submission Deadline: (24-Sept-2023) 11:59 PM.**

**Name: Muhammad Ali Ahmad Reg no.: FA20-BSE-006**

**Submitted To: Ma’am Maha Rasheed**

**Assignment (01) (CLO 1)**

**Instructions:**

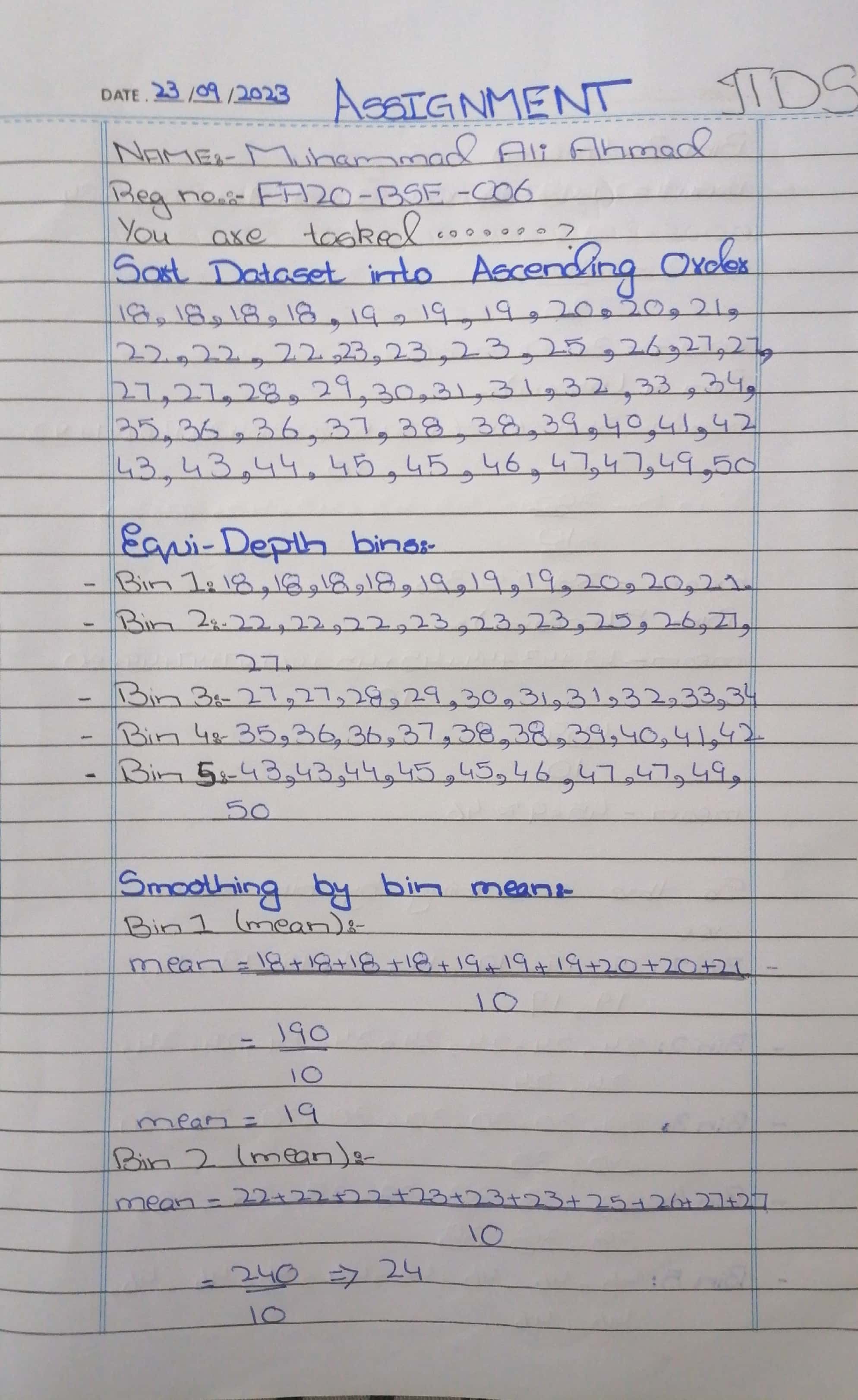
* **Make sure to read all instructions**
* **Make sure this page is the first page of your assignment file.**
* **All answers should start from page 2.**
* **Assignment should be handwritten, scanned and submitted in PDF format.**
* **Mention both name and roll number on this page.**
* **Give justifications where necessary!**
* **MARKS WILL BE DEDUCTED ON NOT FOLLOWING THE FORMAT.**

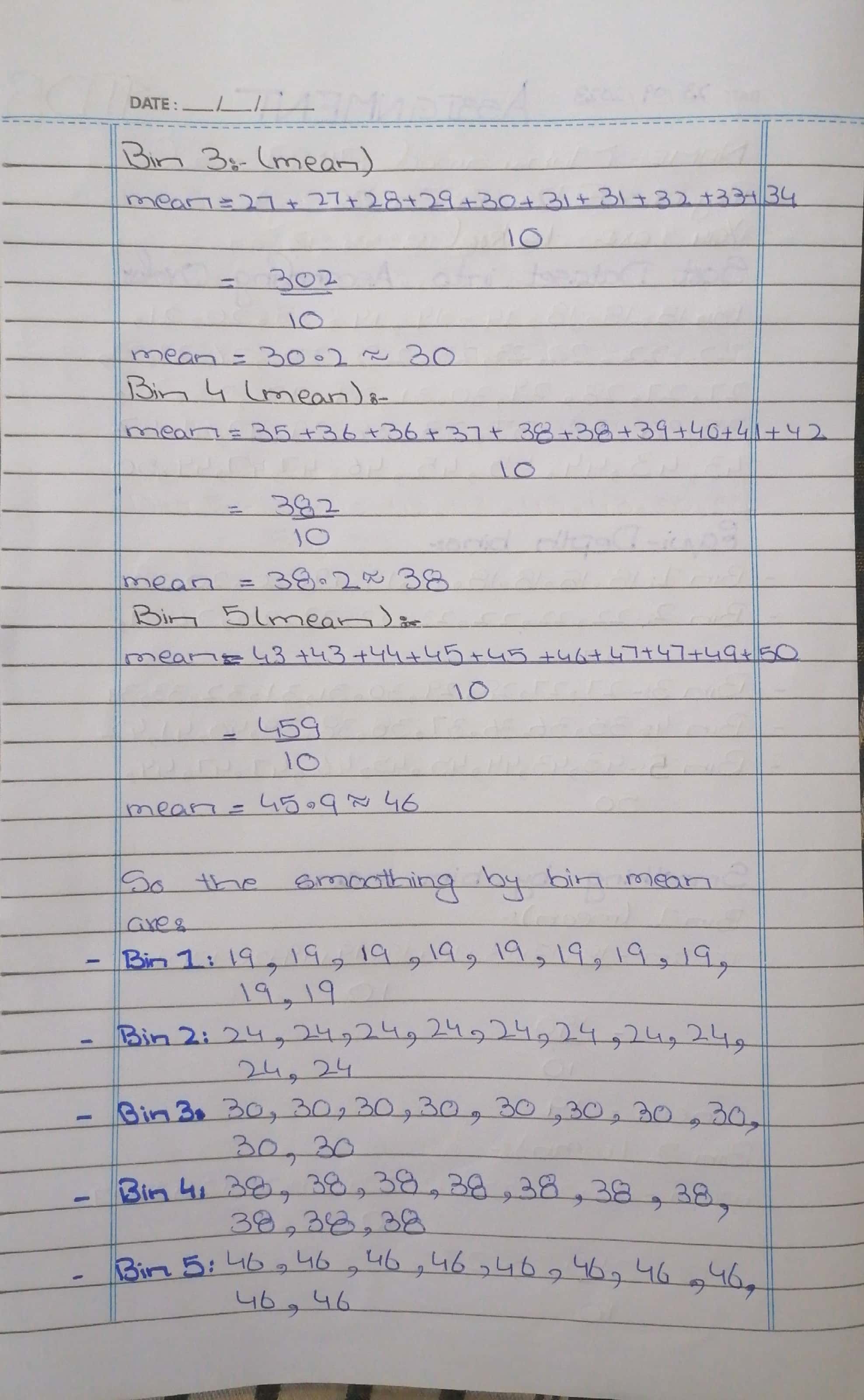
**Assignment Tasks:**

**You are tasked with analyzing a raw dataset containing the ages of a group of individuals. Your goal is to apply bin smoothing techniques, specifically 'Smoothing by Mean' and 'Smoothing by Boundary,' to improve the representation of the data. Preprocess the data into bins of frequency 10 as necessary.**

**Dataset: Ages of Individuals**

40, 23, 31, 27, 19, 45, 36, 20, 29, 22, 43, 38, 25, 18, 47, 27, 35, 30, 42, 33, 26, 21, 43, 28, 32, 44, 19, 41, 37, 18, 49, 34, 23, 22, 46, 18, 20, 50, 39, 27, 19, 31, 27, 22, 45, 38, 23, 18, 47, 36.





A piece of lined paper with writing on it

Description automatically generated