## **Assignment - Sampling**

## **General Instructions – Must Read**

## • Submission Guidelines

- o Multiple submissions are allowed, but **latest submission** will be considered for the evaluation.
- O Submission link will open all the time, but only 50% marks will be awarded if you fail to submit within the due date. No excuse will be considered for the submission.
- o **Zero marks** will be awarded for plagiarized code or result.

## **Program 1 [Required]:**

Program need to perform the following task:

- Download the data-set from the given below link
  https://github.com/AnjulaMehto/Sampling\_DataSet/blob/main/Creditcard\_data.csv
- Convert this data-set into balanced class data-set. (Using the techniques as discussed in the class)
- o Create five samples (using the sample size detection formula as discussed in the class)
- o Apply five different sampling techniques (Sampling1, Sampling2, Sampling3, Sampling4, Sampling5) on five different ML models (M1, M2, M3, M4 and M5)

	Sampling1	Sampling2	Sampling3	Sampling4	Sampling5
M1	50.10	52.24	63.18	69.23	70.12
M2	59.25	65.27	68.72	28.36	30.25
M3	90.45	72.41	32.17	42.58	41.85
M4	78.25	56.24	47.23	33.44	40.12
M5	81.25	12.85	57.36	32.25	52.74

- o Determine which sampling technique gives higher accuracy on which model.
- The put the solution on the "Github" with discussion and then submit the "Github" link using the submission link.