Activity Submission

Problem 1

Data set-1 (X)

Generate random number from sum of last 3 digits of your registration to first 3 digits your birth date (MMDDYYYY)

Data set-2 (Y)

Generate random number from your roll number to sum of first 5 digits of your registration number + 2(roll number).

No. of data for both X and Y: **100**

Example

Range for X: if registration number is 1234567

And birthdate is 12032003

X: 5+6+7 to 120   ie.   18 to 120

Range for Y: if roll number is K23PA23

And registration number is 1234567

Then Y: 23 to 1+2+3+4+5+6+7 + 2*(23) ie. Y: 23 to 74

Evaluate:

1. Find mean, mode, median, variance and standard deviations for both X and Y.
2. Find coefficient of correlation of X and Y.
3. Find matrix of correlation.
4. Regression lines of X on Y and Y on X with graphical plot with the equations.
5. Find rank correlation of X and Y.

Problem 2

Data (X):

Generate random numbers from last digit of your roll number to the sum of your registration number.

Number of data is 10XX

Where XX is last 2 digits of your registration number.

Evaluate:

1. Find minimum, maximum, standard error and sum of data X using excel command.
2. Create bin column and find frequency column.
3. Find P(x) probability mass function.
4. Find f(x) probability density function using normal approximation.
5. Show the comparison of P(x) and f(x) with graph.

Note:

➤ Both problems must be in one Excel file, you can add new sheet by naming it problem 1 and problem 2. For example.
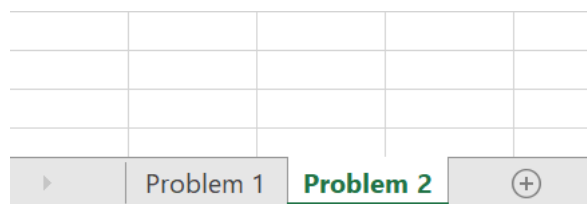
➤ Name of the file must be in the format
  K23PA01
  Means your roll number with section.
➤ Follow the deadline of activity submission strictly. No other time will be provided separately for any reason.
➤ Deadline of submission is before **28-04-2025.**
➤ **Link for the activity submission**
  https://forms.gle/scEmQw9e8dK8RfrBA

  Note: **Ensure no two students use the same dataset; violations will result in UMC.**

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