SCHOOL OF ADVANCED SCIENCES
DEPARTMENT OF MATHEMATICS
WINTER SEMESTER - 2024-25
PMDS503P_Statistical Inference Lab
Programming with R

LAB ASSIGNMENT   Date: 10.02.2025

1. Last date for submission of E-record for assignment is **13ᵗʰ February 2025**.
2. Mention the Register Number, Name, Slot details, Course Code and Course Title on the first page of the document.

Assignment No. 1

1.   Draw a Pie diagram to represent the following data:

Type of Commodity	Expenditure in '000 Rs.	
	Family A	Family B
Food	10	8
Rent	25	36
Clothes	4	7
Education	13	16
Miscellaneous	2	4
Savings	17	33
Total	58	80

2.   Import a Multivariable dataset from ***datasets/MASS*** package and plot the following:

  (i)   Display the number of variables in dataset
  (ii)   Draw a box plot for any two variables.
  (iii)   Scatterplot for any two variables
  (iv)   Multiple bar diagram(with different color)
  (v)   Write your observations.

  Note: Add the labels for X-Axis, Y-Axis and Title of the diagram.

3. From the data set given below, obtain the descriptive statistics for each variable and write your observations on the performance of students.

Sl No	CAT1	CAT2	DA	FAT	QUIZ1	QUIZ2
1	27	36	10	81	16	14
2	26	36	10	73	16	12
3	10	28	10	50	12	14
4	5	0	10	0	18	12
5	43	48	10	94	12	16
6	25	25	10	61	12	14
7	29	35	10	81	14	20
8	28	49	10	80	14	14
9	35	46	10	86	20	16
10	11	10	10	20	15	15
11	25	28	10	60	12	12
12	25	35	10	73	10	12
13	15	33	10	41	12	12
14	7	26	10	30	12	10
15	28	36	10	74	8	14
16	15	26	10	54	12	12
17	16	25	10	55	12	14
18	21	34	10	73	12	12
19	45	44	10	91	20	14
20	15	22	10	42	12	16
21	18	47	10	93	14	16
22	21	41	10	76	16	14
23	15	21	10	50	12	0
24	25	42	10	80	12	16

Sl No	CAT1	CAT2	DA	FAT	QUIZ1	QUIZ2
25	21	47	10	80	12	16
26	20	21	10	50	12	12
27	16	33	10	42	12	12
28	35	42	10	74	14	14
29	20	37	10	70	10	12
30	10	22	10	28	8	20
31	20	20	10	66	12	12
32	20	28	10	42	12	14
33	10	20	10	20	12	12
34	20	21	10	27	14	14
35	15	36	10	65	12	12
36	10	11	10	58	14	14
37	25	25	10	60	14	14
38	21	21	10	45	10	8
39	28	41	10	90	14	16
40	10	22	10	41	12	12
41	37	43	10	80	14	20
42	20	39	10	75	18	20
43	43	48	10	94	10	16
44	15	25	10	50	12	12
45	29	31	10	51	14	12
46	25	36	10	70	14	14
47	25	38	10	60	8	8
48	25	34	10	51	8	12
49	36	45	10	92	14	20
50	29	39	10	74	12	16
51	10	27	10	16	14	10

Sl No	CAT1	CAT2	DA	FAT	QUIZ1	QUIZ2
52	10	13	10	41	15	15
53	25	25	10	50	12	12
54	21	40	10	41	6	14
55	20	41	10	70	12	20
56	20	15	10	50	14	12
57	21	25	10	54	10	16
58	20	31	10	60	8	20
59	20	39	10	80	14	14
60	26	44	10	66	10	12
61	39	34	10	70	10	12
62	25	29	10	50	12	12
63	11	25	10	41	14	14
64	21	35	10	60	14	10
65	44	38	10	80	18	14
66	21	41	10	90	20	14
67	11	10	10	46	10	8
68	40	34	10	72	6	20