ANOVA Problem Statement

1.Three processes A, B and C are tested to see whether their outputs are equivalent. The following observations of outputs are made:

A	10	12	13	11	10	14	15	13
B	9	11	10	12	13			
C	11	10	15	14	12	13		

Carry out the analysis of variance and state your conclusion

2. A test was given to five students taken at random from the fifth class of three schools of a town. The individual scores are

School I	9	7	6	5	8
School II	7	4	5	4	5
School III	6	5	6	7	6

Carry out the analysis of variance.

3.In an experiment on the effects of temperature conditions in human performance 8 persons were given a test on 4 temperature conditions.

The scores in the test are shown inthe following table.

Persons

Temperature	1	2	3	4	5	6	7	8
1	70	80	70	90	80	100	90	80
2	70	80	80	90	80	100	90	80
3	75	85	80	95	75	85	95	75

Perform the analysis of variance and state whether there is any significant difference between persons and temperature conditions

4, Four Varieties of potato are planted, each on five plots of ground of the same size and type and each variety is treated with five different fertilizers. The yields in tons are as follows.

Fertilizers

Varieties	F1	F2	F3	F4	F5
V1	1.9	2.0	2.6	1.8	2.1
V2	2.5	1.9	2.2	2.6	2.2
V3	1.7	1.9	2.2	2.0	2.1
V4	2.1	1.8	2.5	2.2	2.5

Perform an analysis of variance and test whether there is any significant difference between yields of different varieties and fertilizers.

5.The following table gives the retail prices of a commodity in (Rs. Per Kg) in some shops selected at random in four cities.

CITY	A	22	24	20	21
	B	20	19	21	22
	C	19	17	21	18
	D	20	22	21	22

Analysis the data to test the significance of the differences between the price of commodity in four cities.