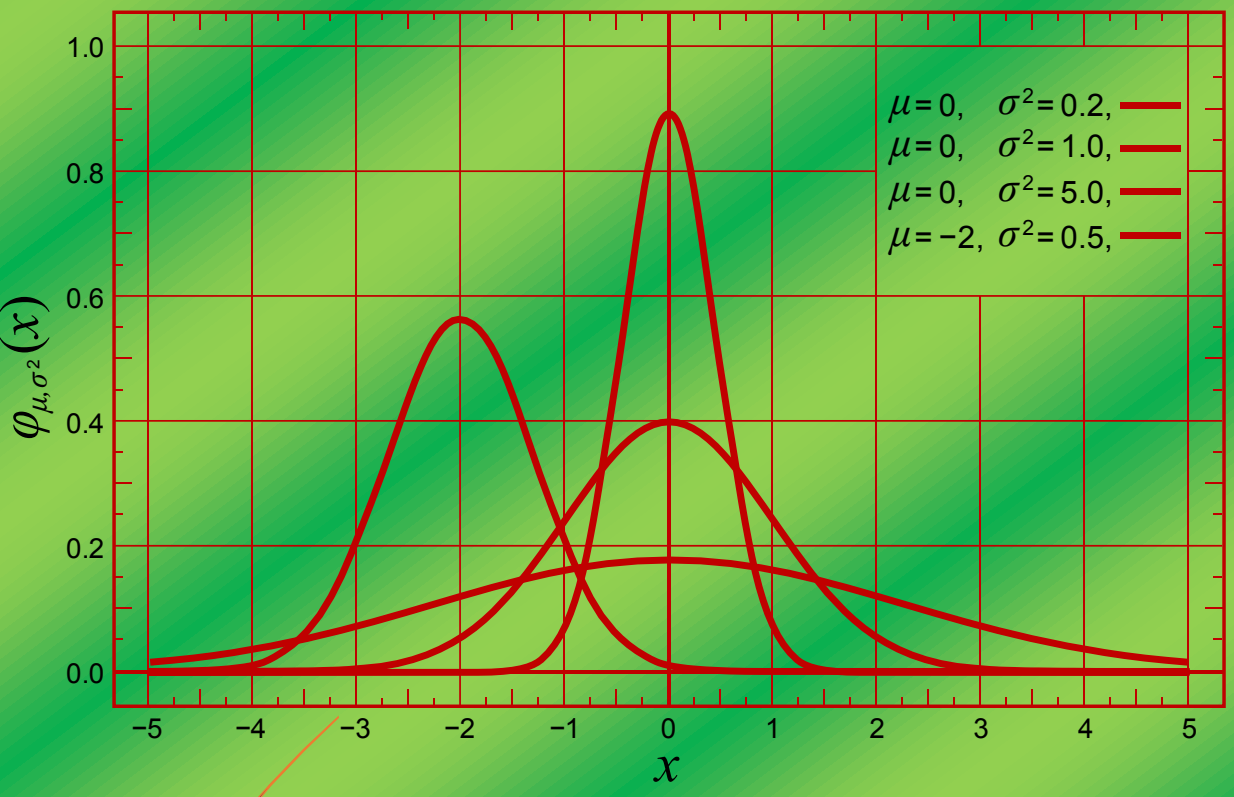
SPSS Practical Manual on Descriptive Statistics



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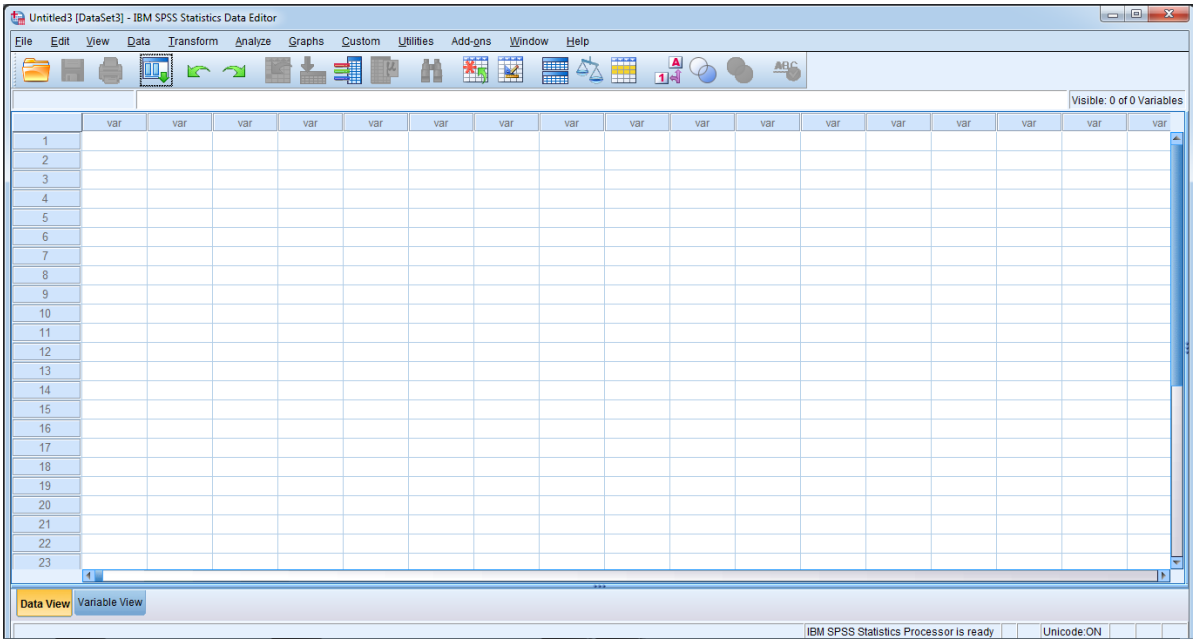
Example: Find the Descriptive Statistics for the following data.

x1	x2	x3	y
50.2	20.5	3.9	104.9
41.4	20.6	4	84.3
36.2	20.5	3.8	77
39.8	19.6	3.9	76.5
41.8	19.5	3.7	88
47.2	20.1	3.6	106.5
39.6	19.3	3.6	89.8
46.6	20.1	3.7	108.7
39.2	19	4.5	80
37.6	18.5	4.6	71.3
38.8	18.1	4.6	77.5
33.6	19.3	4.7	69.5
37.8	20	4.3	80.8
49.6	20.3	4.4	106.5
35.4	20.6	4.2	83.3
41.8	20.3	4.3	95.9
35.6	20	4.1	60
31.4	20.8	4	52.5
33.2	20.3	4.2	53
29.8	19.9	4.1	51
53.4	19.2	4.2	96.4
50.2	19.5	4.5	98.8
49.6	20.3	4.3	99.1
57.8	19.9	4.5	107.2
43.8	19.5	4.3	91.4
46.8	20.4	4.3	99.7
41.4	20.7	4.2	83.3
43.6	20.3	4.3	89.5
50.6	19.7	4.2	91.8
47.8	19.8	4	84.8
41.8	20.1	4.3	70
46.8	20.5	4.1	81.5

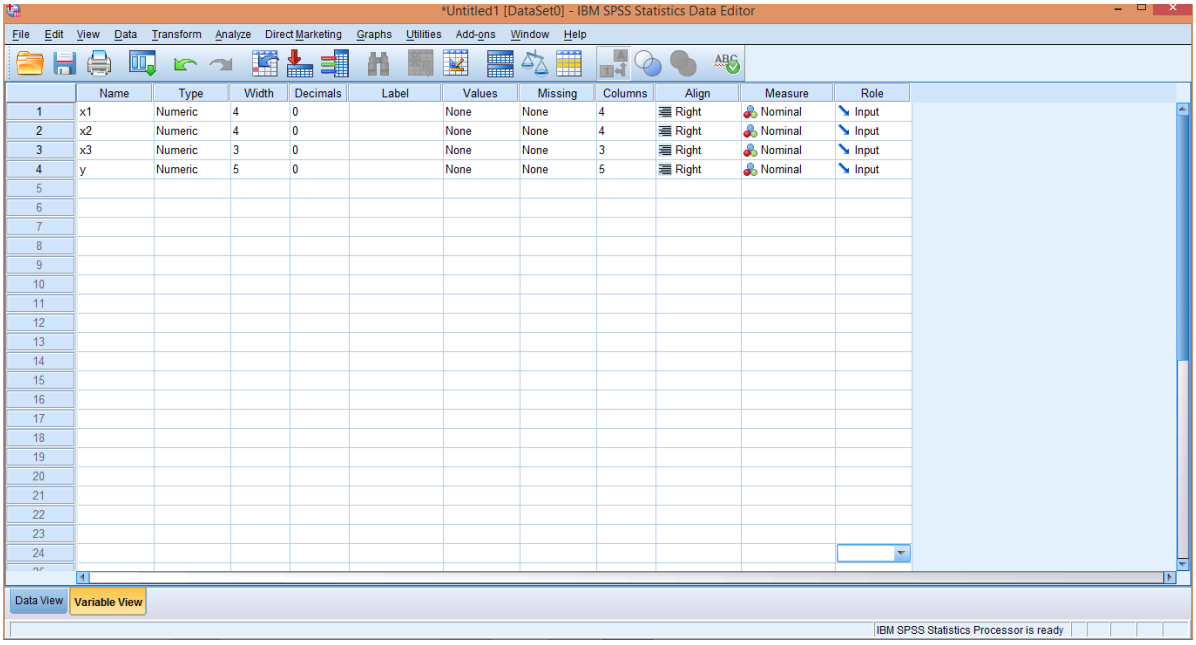
SPSS commands for Descriptive Statistics analysis

The input data file can be created as shown below:

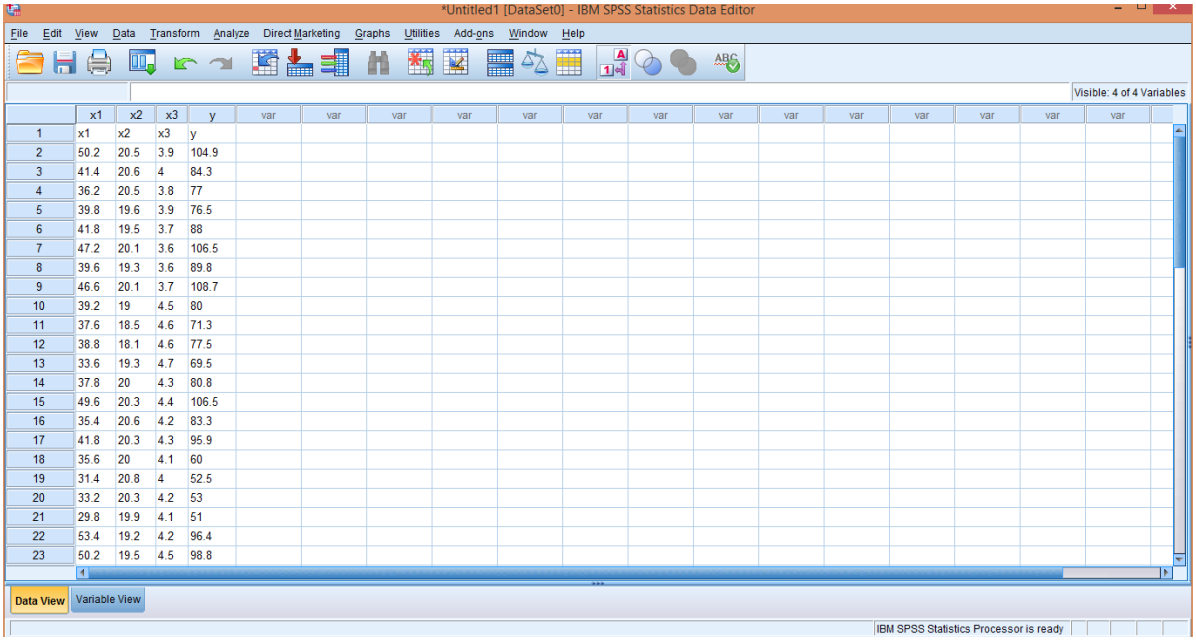
Step 1: File → New → Data →



Step 2: Variable view → Name (x1, x2, x3, y) →

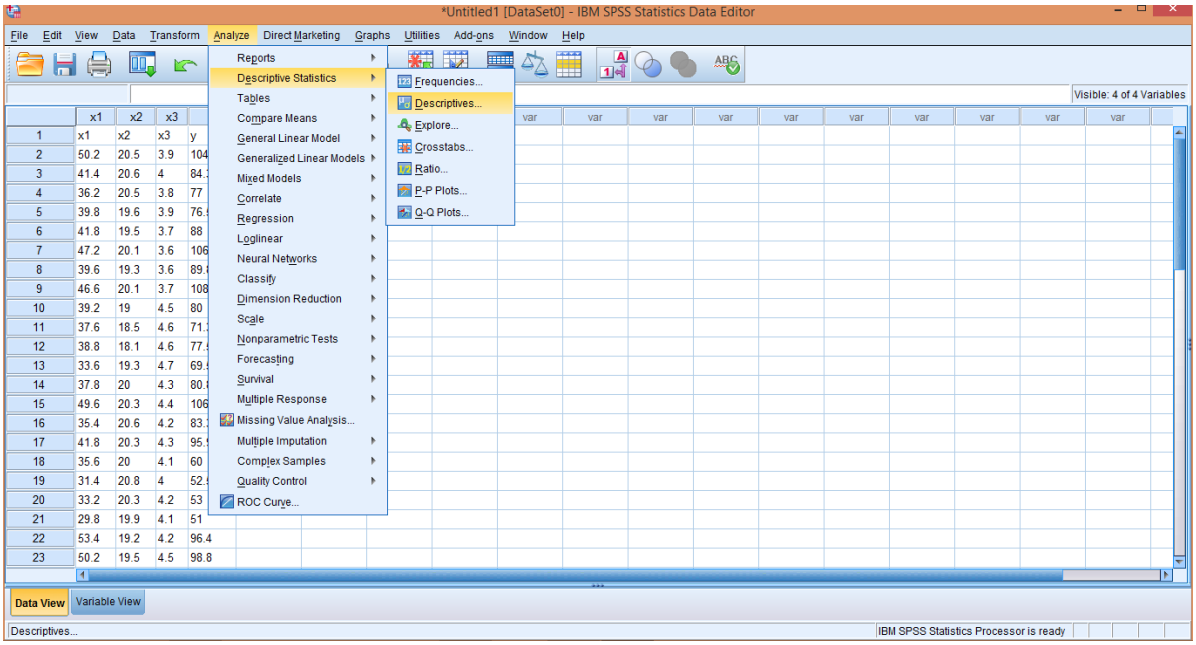


Step 3: Data view → Enter data → File → Save (with file name)

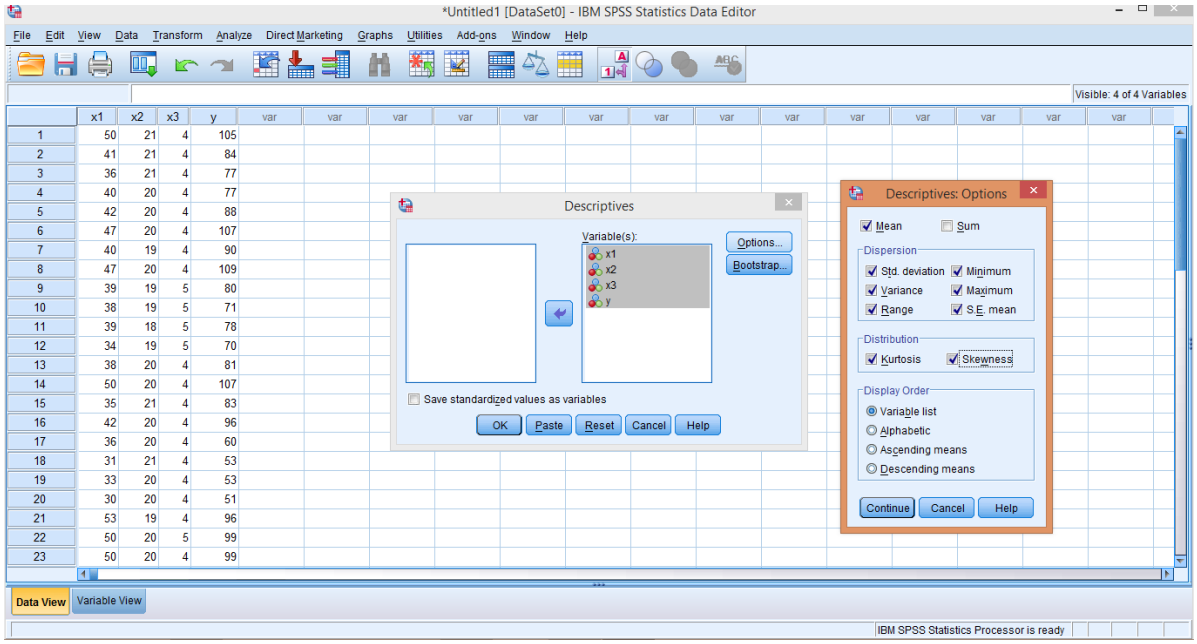


	x1	x2	x3	y
1	x1	x2	x3	y
2	50.2	20.5	3.9	104.9
3	41.4	20.6	4	84.3
4	36.2	20.5	3.8	77
5	39.8	19.6	3.9	76.5
6	41.8	19.5	3.7	88
7	47.2	20.1	3.6	106.5
8	39.6	19.3	3.6	89.8
9	46.6	20.1	3.7	108.7
10	39.2	19	4.5	80
11	37.6	18.5	4.6	71.3
12	38.8	18.1	4.6	77.5
13	33.6	19.3	4.7	69.5
14	37.8	20	4.3	80.8
15	49.6	20.3	4.4	106.5
16	35.4	20.6	4.2	83.3
17	41.8	20.3	4.3	95.9
18	35.6	20	4.1	60
19	31.4	20.8	4	52.5
20	33.2	20.3	4.2	53
21	29.8	19.9	4.1	51
22	53.4	19.2	4.2	96.4
23	50.2	19.5	4.5	98.8

Step 4: Analyze → Descriptive Statistics → Descriptives... →



Step 5: Descriptives → Select Variables→ Options → Descriptive Options →Continue→OK



Output:

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
x1	32	28	30	58	42.51	1.198	6.775	45.902	.141	.414	-.519	.809
x2	32	3	18	21	19.91	.112	.636	.404	-1.035	.414	1.017	.809
x3	32	1	4	5	4.17	.051	.291	.085	-.321	.414	-.443	.809
y	32	58	51	109	84.70	2.863	16.198	262.378	-.502	.414	-.316	.809

Do Yourself

Find the Descriptive Statistics from the following Data.

Batsman	Matches	Innings	Runs	Ave	SR	Hundreds	Fifties	Fours	Sixes
	x1	x2	x3	x4	x5	x6	x7	x8	x9
A	15	14	733	61.08	160.74	1	7	46	59
B	17	17	590	36.87	143.55	0	6	64	17
C	16	16	495	33.00	161.23	0	5	57	19
D	15	15	569	40.64	129.61	0	5	58	18
E	16	16	560	40.00	129.33	1	3	73	10
F	13	13	479	43.54	149.68	0	5	41	20
G	17	16	433	30.92	126.60	1	3	39	18
H	8	8	305	61.00	147.34	1	1	22	20
I	16	13	319	39.87	161.11	0	3	26	15
J	13	12	398	33.16	130.92	0	3	29	17

Reference Books:

1. A Hand Book of Agricultural Statistics, S. R. S. Chandel, Achal Prakashan Mandir, Kanpur.
2. A Text book of Agricultural Statistics, R. Rangaswamy, New Age International (P) Limited, publishers.
3. Biometrical Methods in Quantitative Genetic Analysis, R.K. Singh and B. D. Chaudhary, Kalyani Publishers.
4. Design Resources Server: www.iasri.res.in
5. E-Manual Winter School IASRI.
6. Fundamentals of Mathematical Statistics, S.C. Gupta and V.K. Kapoor, Sultan Chand & Sons Educational Publications.
7. Fundamentals Applied Statistics, S.C. Gupta and V.K. Kapoor, Sultan Chand & Sons Educational Publications.
8. Programmed Statistics, B.L. Agarwal, New Age International (P) Limited, publishers.
9. Probability and Statistical Inference: Theory and Practice, D. Bhattacharya and S. Roy Chowdhury, U. N. Dhur & Sons.
10. Statistics Theory and Practice, D. Bhattacharya and S. Roy Chowdhury, U. N. Dhur & Sons.
11. Statistical Methods, K.P. Dhamu and K. Ramamoorthy, AGROBIOS (INDIA).
12. Statistics for Agricultural Sciences, G. Nageswara Rao, Second Edition, BS Publications, Hyderabad.