

program 1 (I)

- 1) Weight of babies (kg) below 6 months taken from a hospital record is given below. Calculate Mean, Median, Mode and standard deviation and co-efficient of skewness and kurtosis.

Sl.no	1	2	3	4	5	6	7	8	9	10
1	3.0	4.5	4.3	2.5	3.5	2.5	4.0	4.5	6.5	5.0
2	4.0	5.0	4.1	4.2	4.3	4.5	3.3	3.5	3.6	5.3
3	5.4	5.5	5.5	5.7	5.8	5.6	5.8	5.9	6.0	3.4
4	6.1	6.2	6.3	5.5	6.3	6.3	7.0	4.0	3.4	5.0

Aim

:-

To calculate the value of Mean, Median, Mode and standard deviation and co-efficient of skewness and Kurtosis using spss to calculate the weight of babies before 6 months.

ALGORITHM :-

Step 1 :- click start button, select the all program.

Step 2 :- Go to the page of spss 16.0 and enter the given weight of babies to enter the value of weight in rows and columns.

Step 3 :- click the Analyze, and go to select the Descriptive statistics and click the "Descriptives".

Output :-

STAT1

	VAR01	VAR02	VAR03	VAR04	VAR05	VAR06	VAR07	VAR08	VAR09	VAR10
Mean	4.6250	5.1750	5.0500	4.4750	4.9750	4.7250	5.0250	4.4750	4.8750	4.6750
Median	4.7000	5.2500	4.9000	4.8500	5.0500	5.0500	4.9000	4.2500	4.8000	5.0000
Mode	3.00 ^a	4.00 ^a	4.10 ^a	2.50 ^a	3.50 ^a	2.50 ^a	3.30 ^a	3.50 ^a	3.40 ^a	5.00
Std. Deviation	1.39134	.92511	1.63763	1.47507	1.29968	1.68597	1.68597	1.62486	1.60256	.86168
Skewness	-.213	-.435	-.451	-.999	-.191	-.943	-.273	1.121	.070	-.1834
Kurtosis	-.2631	.253	-.3.110	-.421	-.3586	.283	-.2.966	1.308	-.5.445	3.536

Step 4 :-

Now select the required variable to be calculated in spss.

Step 5 :-

Attach the required, Mean, Median, Mode and standard deviation & co-efficient of skewness and Kurtosis are displayed in the screen of spss.

Result :- Thus, the above program executed successfully.

program 1 (ii)

The table below show the hours of relief provide by to analgesic drug in 15 patient suffering from arthritis. Is there any evidence that one drug provides longer relief than the other?

Drug A.	3.0	2.00	3.6	2.6	7.4	3.00	16
	7.00	3.3	2.00	6.8	8.5	7.00	8.00
Drug B	3.5	3.5	5.7	2.4	9.9	4.00	11.8
	6.6	4.5	4.00	9.1	1.8	8.5	7.5

Null hypothesis Drug A and Drug B provides similar relief.

Aim :-

To create the hours of relief provide by to analgesic drugs in 15 patient suffering from arthralgias.

ALGORITHM :-

Step 1

1. Click start button, select all the program.

Step 2

2. Go to the page of spss 16.0 and enter the given drugs in 15 patient to enter the value of drug A and drug B.

Step 3

3. Click the Analyze and select the compare data in spss 16.0

Output :

Oneway - ANOVA.

Drug A.

	Sum of square	df	Mean square	F	sig
Between Group	187.429	11	17.039	34.018	.029
Within Group	1.000	2	.500		
	188.429	13			

9.132 cell (100.0%) have excepted count less than the minimum excepted count .07.

And go to the page of compare data in SPSS 16.0

Step 4

And Now you select the one-way ANOVA test and click the enter button of the page of SPSS

Step 5

Then, the page will appear on the screen of SPSS in [16.0] of Drug A and Drug B.

Step 6

In the screen of statistics tabular appear in the page, whether it is the page of 0.500 its below Null hypothesis

Result :-

Thus, the above program executed successfully.

program 2

The following data on blood sugar level [Mg/100 ML] are obtained from a clinical lab. Analyze the variance between group and find the effectiveness of the herbs on blood sugar level.

Normal	Diabetics	Herb 1	Herb-2
96.00	180.00	180.00	120.00
100.00	225.00	190.00	130.00
111.00	260.00	185.00	130.00
98.00	250.00	190.00	135.00
106.00	265.00	180.00	136.00
105.00	280.00	170.00	140.00

Aim :-

To create the data on blood sugar level [MC/100ML] and analyze variance between group and find the effectiveness of the herbs on blood sugar level.

ALGORITHM :-

Step 1 : Click start button select all the program

Step 2 : Go to the page of spss 16.0 and enter the given patient data on blood sugar level and analyze the variance between groups of the herbs on blood sugar level.

Step 3 : Click analyze, select Compare means in spss 16.0 page

step 4

1. Select the one way ANOVA to compare the means.

step 5

1. Select Normal and Herb A and click enter, Then also click the diabetic and Herb B.

step 6

1. Now click enter the statistical of the data will be appeared.

step 7

1. If the result is less than 0.500 is "Null hypothesis". The group means are equal to one another so it is "Null hypothesis".

Output :-

ANOVA.

Normal.	sum of square	df	Mean square	F	sig
Between Group	107.333	3	35.778	1.316	4.47
Within Group	52.000	2	26.000		
Total	159.333	5			

Result :- Thus, The above program executed successfully.

program 3

3). Find the correlation for the variable, age [year] and systolic blood pressure [mmHg] in man.

Age	56 65 70	42 70	60 74	50 53	54 35	49 38	39 39	62 37
Bp	160 140 123	132 160	125 126	135 145	145 118	115 120	140 138	120 160

Before going to spss, It is important to propose a Null hypothesis and alternative hypothesis.

aim

To create the correlation for the variable, age (year) and systolic blood pressure [mmHg] in man before going to sps.

ALGORITHM :

Step 1 : Click start button, select the all program

Step 2 : Go to the page of sps in lb.o and enter the given data the systolic blood pressure [mmHg] in man.

Step 3 : Click the correlate and select the "Bivariate"

Step 4 : select the option and click in statistics data of Mean and standard deviation and click the

Null hypothesis [H_0] there is no correlation between age and systolic blood pressure. Alternate hypothesis [H_1] there is correlation between age and systolic blood pressure.

Output :-

		Correlation.	
		Age	Bp
Age	pearson correlation sig (2 tailed) N	1 * 17	.510 .017 17
Bp	pearson correlation sig (2 - tailed) N	.510 -017 17	1 17

Correlation is significant at the 0.05 level (2-tailed).

Continue, atlast select
the OKay in the page
of Bivariate correlation

Result :- Thus, the above program
executed successfully.

4) The table shows the hours of relief provided by two analgesic capsules x and y, to 10 patients suffering HIV [human immunodeficiency virus]. Is there any evidence that one capsule provides longer relief than the other?

capsule x	2.1	2.0	2.9	3.6	5.4	3.2
	7.3	4.4	5.2	2.6		
capsule y	3.5	2.7	3.5	2.4	6.5	7.2
	4.5	9.1	1.8	2.9		

Null hypothesis capsule x and y provide similar relief in HIV.

Aim : To create the homes of relief provide by to analgesic capsule x and y the 10 patient suffering from HIV.

ALGORITHM :

Step 1 : Click start button, select the all program.

Step 2 : Go to the page of spss 16.0 and enter the given value of capsule x and y.

Step 3 : Click the Analyze and select the "compare data" in spss 16.0

Step 4 : And go to the page of compare data in spss 16.0

Oneway - ANOVA

OUTPUT :-
capsule

	Sum of square	df	Mean square	F	sig
Between Group	23.749	7	3.393	10.602	.232
Within Group	320	1	.320		
Total	24.069	8			

Step 5

And Now you select the One-way ANOVA test and click the enter button of the page

Step 6

Then the page will appear on the screen of SPSS in (16.0) of capsule X and capsule Y.

Step 7

In the screen of statistics tabular appear on the screen of SPSS.

Result :

Thus, the above program executed successfully.

5) The following data on blood level about 4,500 to 5,700 ml. are obtained from a clinical lab. Analyze the variance between the group and find the effectiveness of blood sugar level stage in correlation variable.

WBC	3.87	6.83	7.65	4.52	8.70
RBC	3.93	4.96	2.75	3.75	5.15
plasma	7.5	6.5	9.7	10.1	12.5

Null hypothesis. The group mean are equal to one another.

dim

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To create the data on blood level about 4500 to 5100 ml are obtained from a clinical lab
Analyze the variance between the group and find the effectiveness of blood level stage in correlation variable.

ALGORITHM :-

Step 1 : Click start button select all the program

Step 2 : Go to page of spss 16.0. Then enter the given patient on blood level and analyze the variance between the groups of blood level.

Output :-

Correlations

		wbc	Rbc	plasma
wbc	pearson correlations	1	-.272	-.418
	sig (2-tailed)		.658	.484
	N	5	5	5
stbc	pearson correlation	-.272	1	-.040
	sig (2-tailed)	.658		.950
	N	5	5	5
plasma	pearson correlation	-.418	-.040	1
	sig (2-tailed)	.484	.950	
	N	5	5	5

Step 3

1. Click the correlate and select the Bivariate

Step 4

: Select the option and click Ok. Before going to click the statistics data of Mean and standard deviation.

Step 5

: Then, click continue. At last select the OK in the page of "Bivariate correlation"

Result

: Thus, the above program executed successfully.