BUSINESS ANALYTICS ASSIGNMENT

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Exercise-1

Create demographic factors for 20 employees of an organisation feed the data on variable view. name your data set and save it.

Aim:

To create a demographic factors for 20 employees of an organisation. Feed the data in variable view. name the data set and save it.

Algorithm

step 1: open spss application

step 2: Go to variables view and enter the variables with values. Types and measure.

step 3: Go to data view.

step 4: Enter the values for 20 employees in the data view.

step 5: Go to file from SPSS menu bar.

step 6: click on save as and enter the file name and select file type as .sav select the location and save approximately.

step 7: verify the exercise.

Exercise 2

Using the dataset employee .sav. Run description and frequencies for the variable (Age, Gender, qualification, salary and experiences)

Aim: To run descriptives and frequencies for the variables of the employee .sav dataset.

Algorithm

Step 1: open The Spss application

Step 2: Go to variables view and enter the variables with values, Type and measure.

Step 3: Go to data view, enter the value for to employee.

Step 4: click analyze for SPSS menu bar - select descriptive statistics - descriptive

Step 5: Select options and select the appropriate descriptive options.

Step 6: click continue and ok

Step 7: verify the output of descriptive

Step 8: Again, click analyze - select descriptive statistics - select frequencies.

Step 9: Select the variables - go to charts and select the appropiate charts.

Exercise 3

Using the dataset employee.sav. Draw a pie chart showing the gender and draw a bar chart for salary.

Aim : To draw a pie chart showing the gender and bar chart for salary using employee.sav dataset.

Algorithm :

Step1; open SPSS application

Step2; Feed the data in the data view.

Step3; Click analyze - descriptive statistics select frequencies.

Step 4; select or drag and drop gender variable

Step 5; Go to chart and select pie chart.

Step 6; click continue and go

Step 7; Goto analyze again. thus descriptive statistics - frequencies.

Step 8; drag and drop salary variable

Step 9; Go to charts - select bar chart.

Step 10; click continue and ok.

Step 11; verify the pie chart for gender and bare chart for salary in the output screen.

Exercise 4:

Prepare a data file in SPSS with relevant variable using appripate scale.

Aim:

To prepare a data file in SPSS with relevant variables using appropriate scales.

Algorithm

Step 1: Open SPSS application

Step 2: Goto variable view and enter The variable with value and Type.

Step 3: Select The appropiate measure from The avialable scales (nominal, ordinal and scale)

step 4: verify the appropiate scales are applied.

step 5: Go to data view and create a data file as required.

Exercise-5.

Prepare a line chart presenting the total number of internet users, number of urban and rural users corresponding to months and your Display values on the graphs of the respective years

Aim : To create a line chart presenting the total number of internet users, number of urban and rural users corresponding to respective month and years.

Algorithm :

Step 1: open SPSS application

Step 2: Go to variable view and enter the values and type.

Step 3: Go to data view and feed the data of internet users.

Step 4: Go to graphs from menu bar - select legacy dialogs - line chart (or) graphs.

Step 5: click on multiple and select value of individual cases and click define.

Step 6: Select the line represents and select month & year variable and under category labels and click ok.

Exercise : 6

prepare clustered and stocked bar charts by using data as mentioned in the table.

Aim :-

To create clustered and stacked bar charts for the internet users dataset.

Algorithm :-

Step 1: open SPSS application.

Step 2: Feed the Internet user data in the data view.

Step 3: Go to graph from menu bar - legacy dialog - Bar

Step 4: click on clustered and select value of individual cases and click define.

Step 5: Select the bar represents and select month and year as variable under category labels and click ok.

Step 6: Follow the above procedure for stacked bar chart. Instead of clustered select stacked.

Step 7: verify the created clustered and stacked bar chart.

Exercise-8

Is there a difference between male and female differ on their opinion towards processed convenience food? use Independent sample test and formulate hypothesis to determine whether the population differ on their opinion towards processed convenience food. Refer declared independent sample test anova.sav

Aim:

To formulate hypothesis using independ sample test, anova to find opinion of population towards convenience food based on gender.

Algorithm

Step 1: open SPSS application

Step 2: Feed the data in the data view

Step 3: Goto analyse from the menu bar - compare means - independent sample test

Step 4: Drag and drop the appropriate test variable and select the grouping variable as gender.

Step 5: Fill the appropriate values in the define groups.

Step 6: click ok

Exercise - 8

Use one way ANOVA and formulate hypothesis to find the difference age of respondents differ in opinion towards processed convenience food.

Aim:

To formulate hypothesis using one way ANOVA to find opinion from different age groups towards processed convenience food.

Algorithm:

step 1: Open the SPSS application.

Step 2: Feed the data in the data view

Step 3: Go to analyze from the menu bar - compare means - one way ANOVA

Step 4: Drag and drop the appropriate test variable and select the grouping variable as age.

step 5: Fill the appropriate values in the define group

Step 6: Click ok.

step 7: verify the output and interpret using significance from one-way ANOVA table.

Exercise 9:

Check the whether the number of words recalled before training and after training are normally distributed on the dataset p e there any allowing on this scale that you would be concerned about? Are scores normally distributed for each group

Aim: To run normality test for the dataset To find out whether the scores are normally distributed for each group.

Algorithm:-

step1: open spss application.

Step 2: Feed the data in the data view

step3: Go to analyze - descriptive statistics explore

Step 4: Drag and drop the variable in dependent list

Step 5: Go to statistics - select descriptives & set confidence interval as 95% — check outliers and percentiles.

Step 6: Go to plots - select normality plots with tests.

Step 7: Click continue and ok

Step 8: Again go to analyze - descriptive statistics -frequencies

Step 9: Select both the variable, go to charts select histogram and check show normal curve on Histogram.

Step 10: Click continue and ok.

Step 11: Verify the test of normality table, normality plate and normal curve on Histogram.

Exercise 10

Perform a paired sample test on the dataset formulate the null and alternate hypothesis what is the mean difference between the two average? Is this different significant? why? will you accept or reject the null hypothesis? why? population have any impact in the scores of the students before and after training?

Aim:

To formulate hypothesis and perform a paired sample t - test

Algorithm:

Step 1: open the SPSS application

Step 2: feed the data in the data view

Step 3: Go to analyse - compare means - paired sample T-test

Step 4: Drag and drop the appropiate paired variable

Step 5: Click ok

Step 6: Go to analyze again - Non parametric Tests - independent sample.

Step7: Click on fields

Step 8: Drag the appropriate variables in test fields and groups

Step 9: Click run and intrepret.

Step10: Verify the paired sample t-test and non parametric test which has been performed.

Exercise: 11

perform a one sample t-test on the dataset
write down null and alternative hypothesis
for one-sample t-test is the IQ of 10 students
shown on the table different from IQ of 123?

Aim:-

To run a one sample t test for
the dataset.

Algorithm:-

step 1: open SPSS application

Step 2: need the data in the dataview

Step 3: Go to analysis compare meant-
one sample t-test

Step 4: Select Iq variable

step 5: enter 125 in the test value

Step 6: click ok

Step 7: verify the output