**Lab Report of Probability and Statistics on SPSS**

Submitted to

**Senior Lecturer Mr. Arjun Kumar Gaire and Senior Lecturer Mr. Keshav Paudel**

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| Submitted by | Roll No. | Group | Lab No. | Lab Date | Submission Date |
| Shronal Duwal | 790343 | B | 2 | 2081/05/18 | 2081/06/01 |
| Lab Title: Generating Data | | | | | |
| Signature of Instructor: | | | | | |

**Objectives:**

1. To generate the data in excel and entry sample data in SPSS
2. To classify the data
3. To import the excel data into SPSS

**Procedure for objective 1**:

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| --- | --- |
| **Step 1:** Open and create new file in excel and enter the variables like (ID, Roll No, S.E.E(G.P.A),Gender, Province, Maths, Science, Physics, Chemistry, Applied, Income, Phone Number) |  |
| **Step 2:** Use function **RANDBETWEEN()** to generates a random whole number between a specified lower and upper limit.   * Formula: =RANDBETWEEN(lower\_limit, upper\_limit) * Example: To generate a random number between 1 and 7 for “Province” column :=RANDBETWEEN(1, 7) |  |

**Output of objective 1:**

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| --- | --- |
| Upon performing the same process for all, the generated random required values for each variable are obtained and saved the file. |  |

**Conclusion for objective 1:**

The RANDBETWEEN () function in Excel was effectively used to generate random values for variables such as ID, Roll\_No, S.E.E(G.P. A), Gender, Province, Maths, Science, Physics, Chemistry, Applied, Phone\_Number. The random data was created within the specified limits, and the Excel file was saved successfully. This completes the data generation process, preparing the dataset for further classification and import into SPSS

**Procedure for objective 2:**

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| --- | --- | --- |
| **Step 1:** click on “Variable View” on the buttom left corner of SPSS interface | |  |
| **Step 2:** Click on the respective column and data to make the variables and make changes. | A screenshot of a computer  Description automatically generated | |

**Output of objective 2:**

|  |  |
| --- | --- |
| Upon making the changes in each variable attributes, we get the final result by clicking on the option “Data View” in the buttom left corner of SPSS interface. |  |

**Conclusion for objective 2:**

The attribute of each variable is modifies as per the requirement like the data type, width, decimals (floating values), label (additional inforamation), values (dictionaries, keys and values), alignment and the measures.

**Procedure for objective 3**:

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| **Step 1:** Open SPSS application |  |
| **Step 2:** Click on the "File" menu at the top left corner of the SPSS interface and select “open” then “data” |  |
| **Step 3:** In the "Open Data" dialog box, change the file type to "Excel (\*.xls, \*.xlsx)" using the "Files of type" dropdown menu. Navigate to the location of your Excel file, select it, and click "Open." |  |

**Output of objective 3:**

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| --- | --- |
| Upon importing the Excel file into SPSS, the data is successfully loaded into a new dataset. The data is saved in SPSS format (.sav) for subsequent use. |  |

**Conclusion for objective 3:**

The Excel file was successfully imported into SPSS, with all variables and values correctly displayed in a new dataset. The data is now ready for analysis and saved in SPSS format for future use.