Course: Data Analysis (task № 8)

Student’s Name and Surname \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Please do the tasks below.

Open **telco.sav** file.

Dependent variable: Customer category

Predictors: select not less than 5 predictors, you can recode or modify the variables before you create a model. Make sure that the correlation between selected predictors is not high.

Use the multinomial logistic regression to analyze the data.

1) Assess the quality of the model.

2) Which gradients are statistically significant?

3) Interpret the influence of each predictor variable on the dependent variable. Please provide detailed interpretation using related risk ratio.

4) Create confusion matrix. What is the percentage of correctly predicted cases by the model for each category of dependent variable? Which category is predicted in the best way?

5) Analyze the case number 10. To which category this customer really belongs to? What is the probability that the customer will choose this category according to the model? To which category should the customer belong to according to the model?

Upload this file in MS Teams.