# **Assignment 4**

# **Report**

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# **Note: -** We’ll be needing ‘psych’ library as we’ll be performing tetrachoric correlation test for binary categorical variables

# **Question 1. Are diabetic peoples being more likely to have Blood Pressure?**

H0: - Diabetic People and Blood Pressure are independent

Ha: - Diabetic People and Blood Pressure are not independent

Conclusion: - Fail to reject H0



# **Question 2. Are people having anemia are more likely to be from female?**

H0: - Anemia and gender are independent

Ha: - Anemia and gender are not independent

Conclusion: - Fail to reject H0



# **Question 3. Are people whose age is in between 55 and 65 having high Blood Pressure are less likely to survive?**

H0: - High Blood Pressure and Death Event are independent for people in ages 55-65

Ha: - High Blood Pressure and Death Event are not independent for people in ages 55-65

Conclusion: - Reject H0. Tetrachoric correlation test shows people between ages 55-65 having high blood pressure are MORE likely to survive



# **Question 4. Are diabetic peoples who smokes are less likely to survive**

H0: - Smoking and death event is independent for diabetic people

Ha: - Smoking and death event is not independent for diabetic people

Conclusion: - Fail to reject H0



# **Question 5. Are male people being more likely to get diabetic?**

H0: - Gender and diabetes are independent

Ha: - Gender and diabetes are not independent

Conclusion: - Reject H0. Tetrachoric correlation test shows males are less likely to have diabetes

