Identify and explain interesting relationships between features and the class you are trying to predict (i.e., relationships with variables and the target classification).

Strongest correlations based on heat map:

Relationship between age and education

Limit balance and bill amount

Default payment next month and payment status each month

High negative correlation between age and marriage status.

After looking at the correlation heat map plot there is an interesting relationship between the pay status for each month and the likeness of an induvial will default payment in the next month. The correlation with pay status and if they are going to default increases as the pay status is closer to the next predicted month. This shows that if last month they defaulted they will do the same next month and also if they did not default then they are likely to not default the next month.

In addition, Age has a very low correlation to predict if someone will default on their payment. Furthermore, the bill amount also does not have a strong correlation if some one will default or not. This means, that if someone that has owes a lot of money or someone that owes very little is not a good predictor if they will default on their next months payment.

