Answers in Intro to SAS Enterprise Miner (EM) and Python for Analytics

BC2407 ANALYTICS II SEMINAR 2

Answer to Class Activity 1 Q1

What is the meaning of %Response and Cumulative % Response [EM PDF p.27]? Explain in your own words.

Ans:

EM Textbook p.28 "the individuals are sorted in descending order of their predicted probability of defaulting on a loan."

Thus, % Response is the % of actual Y = 1 <u>compared to all the cases within</u> the Model Predicted P(Y = 1).

i.e. How much Y = 1 is within the model percentile?

Cumulative % Response is the cumulative version of % Response.

An example using Pass/Fail exam data from BC2406 clarifies these concepts.

Answer to Class Activity 1 Q2

What is the meaning of % Captured Response and Cumulative % Captured Response [EM PDF p.32]? Explain in your own words.

Ans:

% Captured Response is the % of actual Y = 1 within the Model Predicted P(Y = 1), <u>compared to all the Y = 1 cases in the entire data sample</u>.

i.e. How much of Y = 1 has being captured within the model percentile?

Cumulative % Captured Response is the cumulative version. i.e. How much of Y = 1 has being captured up to the model percentile?

An example using Pass/Fail exam data from BC2406 clarifies the difference.

Answer to Class Activity 1 Q3

EM PDF p.27 says "The Effects Plot window contains a bar chart of the absolute value of the model effects. The greater the absolute value, the more important that variable is to the regression model." Do you agree or disagree. Explain in your own words.

Ans:

Disagree. The value of the coefficients are influenced by:

- multicollinearity.

- scale of the X variable (e.g. cm or km?).

- choice of dummy variables for categorical X.

Hence, the magnitude of coefficients per se, do not imply variable importance.

Class Activity 2

Export and Import CSV into EM

Est. Duration: 10 mins

<u>Q&A:</u>

4. Find a way to output the SAS dataset HMEQ into a CSV file. Where is the CSV file saved?

EM > Utility > Save Data node

5. Find a way to import a CSV file into SAS EM.

EM > Sample > File Import node