

# Week 2 - AYU - Pod

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## Questions

Adding code chunks (Ctrl + Alt + I) below of each questions to answer the questions.

1. Run the all codes in the Section 1 and show all the results
2. We will use the Wisconsin Hospital Data again for this question.
  - Train a GLM with the response being the total charge, **TOTCHG**. The response distribution is Gaussian (Normal) and the link function is **identity**. Give the model summary. Make a prediction with the model.
  - Train a GLM with the response being the total charge, **TOTCHG**. The response distribution is Gaussian (Normal) and the link function is **log**. Give the model summary. Make a prediction with the model.
3. Create a binary variable from **TOTCHG** and train a logistic regression with this newly created variable being the response. Give the model summary. Make a prediction with the model. Calculate the training accuracy of the model.
4. Find a dataset that has a counting variable to train a Poisson regression on. Train a Poisson regression with the data. Give the model summary. Make a prediction with the model. Report the p-value of the Goodness of fit test for the model.