UT Machine Learning: HomeWork1

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1 ISL - Chapter: 2 Question: 2

1. n = number of firms = 500
   p =number of features = 3 (profit, number of employees, industry)
   The *output* space is continuous so our problem is regression.
   The question states that we are interested in finding the most influential features on CEO salary so we can conclude that they are more interested in inference than prediction.

2. n = number of similar products = 20
   p = number of features = 13 (price charged for the product, marketing budget, competition price, and ten other variables)
   The *output* space is discrete so our problem is classification ($success, failure$).
   The question states that we are interested in predicting success or failure of the product.

3. n = number of weeks in 2012 = 52
   p = number of features = 4 (% change in the USD/Euro, the % change in the US market, the % change in the British market, and the % change in the German market)
   The *output* space is continuous so our problem is regression.
   The question states that we are interested in predicting the % change in the USD/Euro exchange rate in relation to the weekly changes in the world stock markets.