**20.1**

**Describe analytics models that could be used to help the company monetize their data: How could the company use these data sets to generate value, and what analytics models might they need to do it?**

**1)Using only one data set:**

**Given:**

(from data set #3)

1. list of products purchased in the past, with date of purchase and ship-to address
2. which web pages the person looked at
3. how long the person spent on each page

**Use:** clustering

**To:** group customers for different target marketing goals

**2)Combining different data sets**

(from data set #1 , #2 , #3)

1. **Matching customers**

**Given:**

1. name(first, middle, last)
2. year of birth
3. year of graduation
4. email domain
5. current city

**Use:** classification

**To:** Identify same person in different data sets

1. **Predicting financial statuses**

(from data set #1 , #2 )

**Given:**

1. output from last model of being same person
2. university attended
3. major
4. financial net worth
5. payment records

**Use:** Logistic regression

**To:** predict situations of financial status of different alumni

1. **Discover potential needs**

(from data #1,#2,#3)

**Given:**

1. output from last model
2. list of purchase record
3. which web pages viewed
4. binary variables of interests

**Use:** regression

**To:** discover potential needs of purchasing products ( currently not purchased )