a)

Pclass:

The better the class, the greater the chance of survival.The 3rd class had a much lower frequency of survival than the other classes. Roughly 2/3 of first class members survived, and the 2nd class was fairly even between survivors and deaths.

Sex:

There is a large disparity in survival rate between men and women, women being more fortunate.

Age:

Children under ten had the highest survival rate. Otherwise, there isn’t an obvious trend.

Siblings/Spouses:

There weren’t many individuals with more than one sibling/spouse. Individuals with 1 sibling/spouse had the highest frequency of survival, and those with 0 had a rather low frequency of survival.

Parents/Children:

There were very few individuals with more than 2 parents/children. Those with 1-2 had a high frequency of survival, and those with 0 had lower rates.

Fare:

The majority of passengers paid a fare below 50, and these individuals had a rather low frequency of survival. All passengers who paid more had much greater survival rates.

Port of Embarkation:

Passengers who embarked from Cherbourg had a much higher frequency of survival than the other 2 ports.

b)

We set the probabilities to <occurrences of 0>/<length of y> and <occurrences of 1>/<length of y> for 0 and 1, respectively, and generate n random values from {0, 1} using those probabilities:

Classifying using Random...

-- training error: 0.485

c)

Classifying using Decision Tree...

-- training error: 0.014

d)