* Behavior 1: Number of days studied before a test correlates with the test grades:

After examining several students’ data, I have realized that one of the most relevant factors that affect the students’ grades is the number of days the students spend studying before a test. This is because in this course, most of the grades (70%) are from tests. A direct relationship is obvious here, the earlier the student starts studying before an exam, the better the score is. Following is a decision tree for this behavior:

Days studied before test date

Less than 4 days More than 4 days

Average

Above Average

Number of Activities

Number of Activities

Less than 30 30-60 More than 60

44

* Behavior 2: The number of activities correlates with test scores:

There is a wide range of number of activities along the students. I have searched through the data, calculated the number of activities for students before taking an exam; and found that students with the highest grades have much higher number of activities than those with the lower test scores.

The following is another very useful data mining technique. With Clustering, you can see the range of the test scores in separate classes.