Practice questions:

The dataset contains various measurements (i.e. size, center, etc) from thousands of bacterium under microscope. The last column with non-zero values indicate the bacterium are interesting enough for further study. Otherwise (i.e. last column with zero values), those bacterium are not interesting candidates for further study. Convert this dependent variable to binary values. Normalize predictors first using Z score.

Write a MatLab (or a programming language of your choice) program to perform an

analysis on this dataset using the Support Vector Machine method.

Answer the following questions:

1. How many support vectors did you find?

2. List top 3 records that have the smallest **\*\*absolute\*\*** values from ***wT*** ***X* + *b***

calculation.

3. What are the “***wT*** ***X* + *b***” values for the following records: 131, 165, 892, 1057?

Anything special about those values of these few records?