1. Bishop 7.4

2. Bishop 7.8

3. Carry out SVR (SVM regression) on the Bessel function ($J_0(x)$) dataset from HW#1 & HW#3.

I recommend using `sklearn.svm.SVR` from `scikit-learn`, but this is not obligatory.

Try 'rbf' and 'poly' kernels (for the latter, play with the 'degree' hyperparameter).

Plot the fits for several values of $C$ (regularization parameter) and $\varepsilon$ (size of the $\varepsilon$-tube). Discuss the results and compare them qualitatively with GPR results from HW#3, Pr.4.