Task 1b:

For this task we used Kfold from the sklearn.model\_selection module and Ridge, LinearSVR, LinearRegression, Lasso and SGDRegressor form the sklearn.linear\_model module. With the help of cross validation, we tried to find the optimal hyperparameter of the different models and then choose the best one. The hyperparameter we tried to optimize was the regularization strength. The best model was chosen according to the lowest average RMSE value on the validation sets. In the end the best model was a lasso regression with a regularization strength of 0.05857. This gave an average generalization error of 4.887.