5]:
```
from sklearn.model_selection import cross_val_score, GridSearchCV
grid=None # ToDo: replace it to proper GridSearchCV object and run the grid search with cross validation

# your code here
params = {'C': np.log(np.logspace(-5, 5, base=2, num=20)), 'gamma':np.logspace(-5, 5, base=2, num=20)}
grid = GridSearchCV(SVC(), param_grid=params, cv=3)
grid.fit(X,y)
# )
```

5]:
```
GridSearchCV(cv=3, error_score=nan,
             estimator=SVC(C=1.0, break_ties=False, cache_size=200,
                           class_weight=None, coef0=0.0,
                           decision_function_shape='ovr', degree=3,
                           gamma='scale', kernel='rbf', max_iter=-1,
                           probability=False, random_state=None, shrinking=True,
                           tol=0.001, verbose=False),
             iid='deprecated', n_jobs=None,
             param_grid={'C': array([-3.4657359 , -3.1009216 , -2.73610...
                         'gamma': array([3.12500000e-02, 4.50077043e-02, 6.48221903e-02, 9.33599351e-02,
       1.34461323e-01, 1.93657455e-01, 2.78914479e-01, 4.01705613e-01,
       5.78555119e-01, 8.33262006e-01, 1.20010272e+00, 1.72844379e+00,
       2.48938518e+00, 3.58532838e+00, 5.16375679e+00, 7.43708284e+00,
       1.07112328e+01, 1.54268160e+01, 2.22184183e+01, 3.20000000e+01])},
             pre_dispatch='2*n_jobs', refit=True, return_train_score=False,
             scoring=None, verbose=0)
```