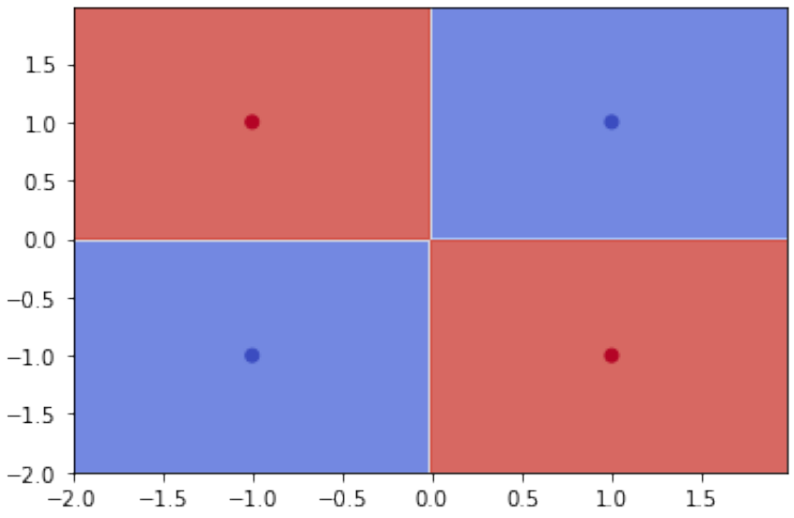
In [15]:
```
# Importing libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
from sklearn import svm
```

In [16]:
```
train_df = pd.read_csv('train.csv')
test_df = pd.read_csv('test.csv')
```

In [17]:
```
X = np.array([
    [-1, -1],
    [-1, 1],
    [1, -1],
    [1, 1]
])

y = np.array([0, 1, 1, 0])

h = .02

C = 1.0
poly_svc = svm.SVC(kernel='poly', degree=2, C=C).fit(X, y)

x_min, x_max = X[:, 0].min() - 1, X[:, 0].max() + 1
y_min, y_max = X[:, 1].min() - 1, X[:, 1].max() + 1
xx, yy = np.meshgrid(np.arange(x_min, x_max, h),
                     np.arange(y_min, y_max, h))

Z = poly_svc.predict(np.c_[xx.ravel(), yy.ravel()])

Z = Z.reshape(xx.shape)
plt.contourf(xx, yy, Z, cmap=plt.cm.coolwarm, alpha=0.8)

plt.scatter(X[:, 0], X[:, 1], c=y, cmap=plt.cm.coolwarm)

plt.xlim(xx.min(), xx.max())
plt.ylim(yy.min(), yy.max())

plt.show()
```



In [ ]: