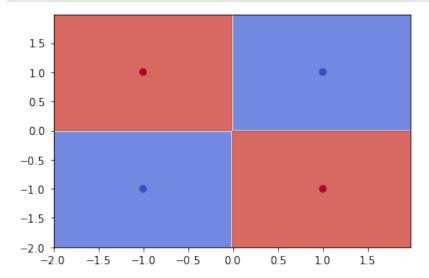
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```
In [15]: # Importing libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
from sklearn import svm
```

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

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```
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, <math>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 []:

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