# Exercise 1: Looking for clusters visually

From the course *Transition to Data Science*. Buy the entire course for just $10 for many more exercises and helpful video lectures.

You are given an array `points` of size 300x2, where each row gives the (x, y) co-ordinates of a point on a map. Make a scatter plot of these points, and use the scatter plot to guess how many clusters there are.

**Step 1:** Load the dataset *(written for you)*.

```
In [1]: import pandas as pd

        df = pd.read_csv('../datasets/ch1ex1.csv')
        points = df.values
```

**Step 2:** Import PyPlot

```
In [2]: import matplotlib.pyplot as plt
```

**Step 3:** Create an array called `xs` that contains the values of `points[:,0]` - that is, column `0` of `points`:

```
In [3]: xs = points[:,0]
```

**Step 3:** Create an array called `ys` that contains the values of `points[:,1]` - that is, column `1` of `points`

```
In [4]: ys = points[:,1]
```

**Step 4:** Make a scatter plot by passing `xs` and `ys` to the `plt.scatter()` function.

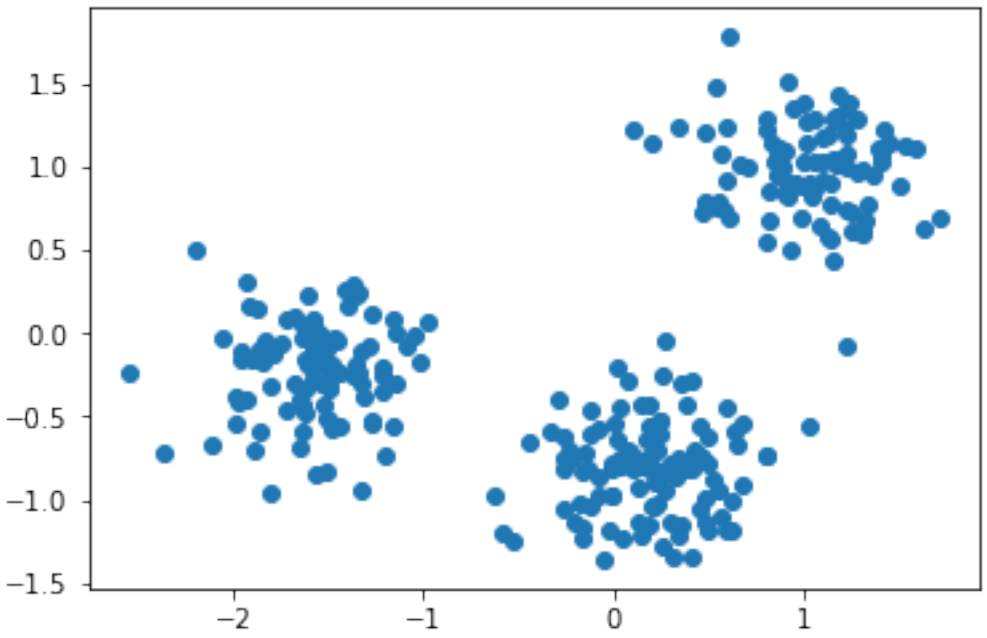
```
In [5]: plt.scatter(xs, ys)
```

```
Out[5]: <matplotlib.collections.PathCollection at 0x110fc45c0>
```

**Step 5:** Call the `plt.show()` function to show your plot.

```
In [6]: plt.show()
```




In [ ]: