

```
import matplotlib as mpl
import matplotlib.pyplot as plt
```

```
file read
```

Timestamp	What's your level of interest for the following areas of Data Science? [Data Visualization]	What's your level of interest for the following areas of Data Science? [Machine Learning]	What's your level of interest for the following areas of Data Science? [Data Analysis / Statistics]	What's your level of interest for the following areas of Data Science? [Big Data (Spark / Hadoop)]	What's your level of interest for the following areas of Data Science? [Data Journalism]	What's your level of interest for the following areas of Data Science? [Deep Learning]
0 2017/10/17 1:11:52 PM MDT	Very interested	Very interested	Somewhat interested	Not interested	Somewhat interested	Somewhat interested
1 2017/10/17 2:26:07 PM MDT	Very interested	Very interested	Very interested	Somewhat interested	Not interested	Very interested
2 2017/10/17 2:37:08 PM MDT	Not interested	Very interested	Somewhat interested	Very interested	Not interested	Very interested
3 2017/10/17 2:39:26 PM MDT	Very interested	Very interested	Very interested	Very interested	Somewhat interested	Very interested
4 2017/10/17 2:43:59 PM MDT	Somewhat interested	Very interested	Very interested	Very interested	Not interested	Somewhat interested

	What's your level of interest for the following areas of Data Science? [Data Visualization]	What's your level of interest for the following areas of Data Science? [Machine Learning]	What's your level of interest for the following areas of Data Science? [Data Analysis / Statistics]	What's your level of interest for the following areas of Data Science? [Big Data (Spark / Hadoop)]	What's your level of interest for the following areas of Data Science? [Data Journalism]	What's your level of interest for the following areas of Data Science? [Deep Learning]
0	Very interested	Very interested	Somewhat interested	Not interested	Somewhat interested	Somewhat interested
1	Very interested	Very interested	Very interested	Somewhat interested	Not interested	Very interested
2	Not interested	Very interested	Somewhat interested	Very interested	Not interested	Very interested
3	Very interested	Very interested	Very interested	Very interested	Somewhat interested	Very interested
4	Somewhat interested	Very interested	Very interested	Very interested	Not interested	Somewhat interested
5	Very interested	Very interested	Very interested	Very interested	Very interested	Very interested

```
pd_survey.rename(columns = {pd_survey.columns[0]: 'Data Visualization',
                             pd_survey.columns[1]: 'Machine Language',
                             pd_survey.columns[2]: 'Data Analysis / Statistics',
                             pd_survey.columns[3]: 'Big Data (Spark / Hadoop)',
                             pd_survey.columns[4]: 'Data Journalism',
                             pd_survey.columns[5]: 'Deep Learning'}, inplace=True)

pd_survey.head(6)
```

	Data Visualization	Machine Language	Data Analysis / Statistics	Big Data (Spark / Hadoop)	Data Journalism	Deep Learning
0	Very interested	Very interested	Somewhat interested	Not interested	Somewhat interested	Somewhat interested
1	Very interested	Very interested	Very interested	Somewhat interested	Not interested	Very interested
2	Not interested	Very interested	Somewhat interested	Very interested	Not interested	Very interested
3	Very interested	Very interested	Very interested	Very interested	Somewhat interested	Very interested
4	Somewhat interested	Very interested	Very interested	Very interested	Not interested	Somewhat interested
5	Very interested	Very interested	Very interested	Very interested	Very interested	Very interested

```
pd_survey.columns = list(map(str, pd_survey.columns))
```

```
pd_survey.apply(pd.value_counts).fillna(0).transpose()
```

	Not interested	Somewhat interested	Very interested
Data Visualization	102	734	1340
Machine Language	74	477	1629
Data Analysis / Statistics	60	444	1688
Big Data (Spark / Hadoop)	127	729	1332
Data Journalism	610	1081	429
Deep Learning	136	770	1263