

## Splitting Dependent and Independent Columns

```
In [60]: data.head()
data.drop(['location', 'station', 'state'], axis = 1, inplace=True)
```

```
In [61]: data.head()
```

```
Out[61]:
```

	Temp	do	ph	co	bod	na	tc	year	npH	ndo	...	nbdo	nec	nna	wph	wdo	wbdo	wec	wna	wco	wqi
0	30.6	6.7	7.5	203.0	6.940049	0.1	27.0	2014	100	100	...	60	60	100	16.5	28.10	14.04	0.54	2.8	22.48	84.46
1	29.8	5.7	7.2	189.0	2.000000	0.2	8391.0	2014	100	80	...	100	60	100	16.5	22.48	23.40	0.54	2.8	11.24	76.96
2	29.5	6.3	6.9	179.0	1.700000	0.1	5330.0	2014	80	100	...	100	60	100	13.2	28.10	23.40	0.54	2.8	11.24	79.28
3	29.7	5.8	6.9	64.0	3.800000	0.5	8443.0	2014	80	80	...	80	100	100	13.2	22.48	18.72	0.90	2.8	11.24	69.34
4	29.5	5.8	7.3	83.0	1.900000	0.4	5500.0	2014	100	80	...	100	80	100	16.5	22.48	23.40	0.72	2.8	11.24	77.14

5 rows × 21 columns

```
In [62]: x=data.iloc[:,0:7].values
```

```
In [63]: x.shape
```

```
Out[63]: (1991, 7)
```

```
In [64]: y=data.iloc[:, -1:].values
y.shape
```

```
Out[64]: (1991, 1)
```



Out[63]: (1991, 1)

```
In [64]: y=data.iloc[:,1:].values
         y.shape
```

Out[64]: (1991, 1)

```
In [65]: print(x)
```

```
[[3.06000000e+01 6.70000000e+00 7.50000000e+00 ... 6.94004877e+00
  1.00000000e-01 2.70000000e+01]
 [2.98000000e+01 5.70000000e+00 7.20000000e+00 ... 2.00000000e+00
  2.00000000e-01 8.39100000e+03]
 [2.95000000e+01 6.30000000e+00 6.90000000e+00 ... 1.70000000e+00
  1.00000000e-01 5.33000000e+03]
 ...
 [2.80000000e+01 7.60000000e+00 9.80000000e+01 ... 1.20000000e+00
  1.62307871e+00 5.70000000e+02]
 [2.80000000e+01 7.70000000e+00 9.10000000e+01 ... 1.30000000e+00
  1.62307871e+00 5.62000000e+02]
 [2.90000000e+01 7.60000000e+00 1.10000000e+02 ... 1.10000000e+00
  1.62307871e+00 5.46000000e+02]]
```

```
In [66]: print(y)
```

```
[[84.46]
 [76.96]
 [79.28]
 ...
 [66.44]
 [66.44]
 [66.44]]
```