

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

Roll 60 times and record results

```
In [6]: import random

def roll_dice(num_sides=6):
    return random.randint(1, num_sides)

rolls = []
for _ in range(60):
    rolls.append(roll_dice())
df = pd.DataFrame(rolls)
df
```

```
Out[6]:
```

	0
0	4
1	1
2	1
3	4
4	6
5	3
6	5
7	4
8	4
9	3
10	6
11	3
12	5
13	4
14	5
15	3
16	2
17	6
18	1
19	3
20	5
21	1
22	3
23	1
24	5
25	1
26	1
27	5
28	2
29	5
30	1
31	4

```
0
32 2
33 5
34 2
35 1
36 6
37 3
38 5
39 1
40 5
41 3
42 5
43 4
44 2
45 5
46 2
47 6
48 2
49 1
50 2
51 1
52 4
53 6
54 4
55 4
56 6
57 6
58 2
59 1
```

```
In [16]: print("Mean: " + str(df.mean()[0]) + "\nStandard Deviation: " + str(df.std()
```

```
Mean: 3.3833333333333333
Standard Deviation: 1.7572288147377486
```

Remap 5 and 6 to success, everything else as failure

```
In [ ]: mapped = []
for _, row in df.iterrows():
    if row[0] > 4:
        mapped.append(True)
    else:
        mapped.append(False)

dfMapped = pd.DataFrame(mapped)
dfMapped
```

```
Out[1]: 0
0 False
1 False
2 False
3 False
4 True
5 False
6 True
7 False
8 False
9 False
10 True
11 False
12 True
13 False
14 True
15 False
16 False
17 True
18 False
19 False
20 True
21 False
22 False
23 False
24 True
25 False
26 False
27 True
28 False
29 True
30 False
31 False
```

```
0
32 False
33 True
34 False
35 False
36 True
37 False
38 True
39 False
40 True
41 False
42 True
43 False
44 False
45 True
46 False
47 True
48 False
49 False
50 False
51 False
52 False
53 True
54 False
55 False
56 True
57 True
58 False
59 False
```