DAY 16

```
import pandas as pd
df=pd.read_csv('Social_Network.csv')
def func(Age):
   if Age>25:
      return Age
   else:
      return 'too young'
df['encoded']=df['Age'].apply(func)
df['new']=df['Age']*10

url='https://archive.ics.uci.edu/ml/machine-learning-databases/adult/adult.data'
df1=pd.read_csv(url,header=None)
df1.to_excel('test.xlsx')
df1[[1,3,8]].to_excel('selected.xlsx')
df2=pd.read_excel('test.xlsx')
df1.to_html('new.html')
df3=pd.read_csv('SMSSpamCollection.txt',
            sep='\t',header=None,names=['type of message','message'])
df3['type of message'].str.upper()
df3['message'][1].replace('...','*')
con=df3['type of message']=='spam'
df4=df3[con]
con1=df3['message'].str.contains('stock')
df5=df3[con1]
```

o/p

```
import pandas as pd
```

```
url='https://archive.ics.uci.edu/ml/machine-learning-databases/adult/adult.data'
df1=pd.read_csv(url,header=None)

df1.to_excel('test.xlsx')

df1[[1,3,8]].to_excel('selected.xlsx')

pd.read_excel('test.xlsx')
```

Out[6]:

	Unnamed: 0	0	1	...	12	13	14
0	0	39	State-gov	...	40	United-States	<=50K
1	1	50	Self-emp-not-inc	...	13	United-States	<=50K
2	2	38	Private	...	40	United-States	<=50K
3	3	53	Private	...	40	United-States	<=50K
4	4	28	Private	...	40	Cuba	<=50K
...	...	...	...	...	...	...	...
32556	32556	27	Private	...	38	United-States	<=50K
32557	32557	40	Private	...	40	United-States	>50K
32558	32558	58	Private	...	40	United-States	<=50K
32559	32559	22	Private	...	20	United-States	<=50K
32560	32560	52	Self-emp-inc	...	40	United-States	>50K

[32561 rows x 16 columns]

```
df2=pd.read_excel('test.xlsx')

df1.to_html('new.html')
df3=pd.read_csv('SMSSpamCollection.txt',
            sep='\t',header=None)
```

df3=pd.read_csv('SMSSpamCollection.txt',

sep='\t',header=None,names=['type of message','message'])

df3['type of message'].str.upper()

Out[13]:

0 HAM

1 HAM

2 SPAM

3 HAM

4 HAM

5567 SPAM

5568 HAM

5569 HAM

5570 HAM

5571 HAM

Name: type of message, Length: 5572, dtype: object

df3['message'][1]

Out[14]: 'Ok lar... Joking wif u oni...'

df3['message'][1].replace('...','*')

Out[15]: 'Ok lar* Joking wif u oni*'

con=data['type of message']=='spam'

df3[con]

Out[17]:

type of message message

2	spam	Free entry in 2 a wkly comp to win FA Cup fina...
5	spam	FreeMsg Hey there darling it's been 3 week's n...
8	spam	WINNER!! As a valued network customer you have...
9	spam	Had your mobile 11 months or more? U R entitle...
11	spam	SIX chances to win CASH! From 100 to 20,000 po...
...	...	...
5537	spam	Want explicit SEX in 30 secs? Ring 02073162414...
5540	spam	ASKED 3MOBILE IF 0870 CHATLINES INCLU IN FREE ...
5547	spam	Had your contract mobile 11 Mnths? Latest Moto...
5566	spam	REMINDER FROM O2: To get 2.50 pounds free call...
5567	spam	This is the 2nd time we have tried 2 contact u...

[747 rows x 2 columns]

df4=df3[con]

con1=df3['message'].str.contains('stock')

df5=df3[con1]