Write a Pandas program to select the rows the score is between 15 and 20 (inclusive).

Sample DataFrame: exam_data = {'name': ['Anastasia', 'Dima', 'Katherine', 'James', 'Emily', 'Michael', 'Matthew', 'Laura', 'Kevin', 'Jonas'], 'score': [12.5, 9, 16.5, np.nan, 9, 20, 14.5, np.nan, 8, 19], 'attempts': [1, 3, 2, 3, 2, 3, 1, 1, 2, 1], 'qualify': ['yes', 'no', 'yes', 'no', 'no', 'yes', 'yes', 'no', 'no', 'yes']} labels = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j']

```
# your code here
import pandas as pd
import numpy as np

exam_data = {'name': ['Anastasia', 'Dima', 'Katherine', 'James', 'Emi
labels = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j']
df = pd.DataFrame(exam_data)
print(df[df.score.between(15, 20)])
```

```
          name  score  attempts qualify
2  Katherine   16.5         2     yes
5    Michael   20.0         3     yes
9      Jonas   19.0         1     yes
```

Write a Pandas program to add a column named "column1" in the sixth position of the "coalpublic2013.xlsx" excel sheet and fill it with NaN values.

```
# your code here
import pandas as pd
import numpy as np

from google.colab import drive
drive.mount('/content/gdrive')
```

```
df = pd.read_excel('/content/gdrive/MyDrive/coalpublic2013.xlsx')
df.insert(5, "column1", np.nan)
print(df.columns)
```

```
Drive already mounted at /content/gdrive; to attempt to forcibl
Index(['Year', 'MSHA ID', 'Mine_Name', 'Production', 'Labor_Hou
```

Write a Pandas program to import given excel data (coalpublic2013.xls

```
# your code here
import pandas as pd
import numpy as np

from google.colab import drive
drive.mount('/content/gdrive')

df = pd.read_excel('/content/gdrive/MyDrive/coalpublic2013.xlsx')
print(df[df.Mine_Name.str.startswith('P')] )
```

```
Drive already mounted at /content/gdrive; to attempt to forcibl
    Year  MSHA ID                      Mine_Name Production Lab
13  2013   103332                 Powhatan Mine   1,40,521
18  2013   102976  Piney Woods Preparation Plant          0
19  2013   102976  Piney Woods Preparation Plant          0
46  2013   103321                Poplar Springs   1,89,370
```

ite a Pandas program to import given excel data (employee.xlsx) into

```
# your code here
import pandas as pd
import numpy as np

from google.colab import drive
drive.mount('/content/gdrive')
```

```
df = pd.read_csv('/content/gdrive/MyDrive/employee.csv')
#print(df[df.hire_date > '2007/01/01'])
#print(df[df.hire_date > '01/01/2007'])
df.hire_date=pd.to_datetime(df.hire_date)
print(df[df['hire_date'] >'2007/01/01'])
```

```
Drive already mounted at /content/gdrive; to attempt to forcibl
    emp_id first_name   last_name  hire_date
4      104      Bruce       Ernst 2007-05-21
7      107      Diana     Lorentz 2007-02-07
13     113       Luis        Popp 2007-12-07
19     119      Karen  Colmenares 2007-08-10
```

Find the average mileage of each car making company
Expected Output:

```
# your code here
import pandas as pd
import numpy as np

from google.colab import drive
drive.mount('/content/gdrive')

df = pd.read_csv('/content/gdrive/MyDrive/Automobile_data.csv')
#print(df.average-mileage.groupby(by='company')) error??
#print(df['average-mileage'].groupby(by='company'))
#print(df['company','average-mileage'])
#print(df['average-mileage'].mean())
Average=df.groupby(by='company')
print(Average['average-mileage'].mean())
```

```
Drive already mounted at /content/gdrive; to attempt to forcibl
company
alfa-romero      20.333333
audi             20.000000
bmw              19.000000
```

```
chevrolet        41.000000
dodge            31.000000
honda            26.333333
isuzu            33.333333
jaguar           14.333333
mazda            28.000000
mercedes-benz    18.000000
mitsubishi       29.500000
nissan           31.400000
porsche          17.000000
toyota           28.714286
volkswagen       31.750000
volvo            23.000000
Name: average-mileage, dtype: float64
```

Find the most expensive car company name

```
# your code here
import pandas as pd
import numpy as np

from google.colab import drive
drive.mount('/content/gdrive')

df = pd.read_csv('/content/gdrive/MyDrive/Automobile_data.csv')
print(max(df.price))
```

```
Drive already mounted at /content/gdrive; to attempt to forcibl
45400.0
```