1. **What task does the following line of code perform? (1 Point)**

```
df['peak-rpm'].mean()
```

Calculate the mean of the column 'peak-rpm'

2. **What task do the following lines of code perform? (1 Point)**

```
avg=df['bore'].mean(axis=0)
df['bore'].replace(np.nan, avg, inplace= True)
```

Calculate the mean value for the 'bore' column and replace all the NaN values of that column by the mean value

3. **Consider the dataframe df; convert the column df['city-mpg'] to dif['city-L/100km'] by dividing 235 by each element in the column 'city-mpg'. (1 Point)**

```
df['city-L/100km'] = 235/df["city-mpg"]
```

4. **What data type is the following set of numbers? 666, 1.1, 232, 23.12 (1 Point)**

Float

5. **The following code is an example of: (1 Point)**

```
df['length'] = df['length']/df['length'].max()
```

Simple feature scaling

6. **Consider the two column 'horsepower' and 'horsepower-binned'; from the dataframe df; how many categories are there in the 'horsepower-binned' column? (1 Point)**

3

	horsepower	horsepower-binned
0	111.0	Medium
1	111.0	Medium
2	154.0	Medium
3	102.0	Medium
4	115.0	Medium
5	110.0	Medium
6	110.0	Medium
7	110.0	Medium
8	140.0	Medium
9	101.0	Low
10	101.0	Low
11	121.0	Medium
12	121.0	Medium
13	121.0	Medium
14	182.0	High
15	182.0	High
16	182.0	High
17	48.0	Low
18	70.0	Low
19	70.0	Low