

```
In [68]: df_car = pd.get_dummies(df_car, columns=['aspiration'], drop_first=True)
```

```
In [69]: df_car.head()
```

```
Out[69]:
```

	num-of-doors	num-of-cylinders	engine-location	doors	cylinders	drive-wheels_4wd	drive-wheels_fwd	drive-wheels_rwd	aspiratic
0	two	four	front	2	4	False	False	True	
1	two	four	front	2	4	False	False	True	
2	two	six	front	2	6	False	False	True	
3	four	four	front	4	4	False	True	False	
4	four	five	front	4	5	True	False	False	

Challenge task:

```
In [71]: import pandas as pd

url = "imports-85.csv"
col_names = [
    'symboling', 'normalized-losses', 'make', 'fuel-type', 'aspiration',
    'num-of-doors', 'body-style', 'drive-wheels', 'engine-location',
    'wheel-base', 'length', 'width', 'height', 'curb-weight',
    'engine-type', 'num-of-cylinders', 'engine-size', 'fuel-system',
    'bore', 'stroke', 'compression-ratio', 'horsepower', 'peak-rpm',
    'city-mpg', 'highway-mpg', 'price'
]

df_car = pd.read_csv(url, sep=',', names=col_names, na_values="?", header=None)

df_car.columns = df_car.columns.str.strip()

df_car_subset = df_car[[
    'aspiration', 'num-of-doors', 'drive-wheels', 'num-of-cylinders',
    'engine-location', 'fuel-type'
]].copy()

print(df_car_subset.head())
```

	aspiration	num-of-doors	drive-wheels	num-of-cylinders	engine-location	fuel-type
0	two	convertible	front	130	88.6	
std						
1	two	convertible	front	130	88.6	
std						
2	two	hatchback	front	152	94.5	
std						
3	four	sedan	front	109	99.8	
std						
4	four	sedan	front	136	99.4	
std						

Congratulations!

You have completed this lab, and you can now end the lab by following the lab guide instructions.

```
In [75]: df_encoded = pd.get_dummies(df_car_subset, columns=['engine-location', 'fuel-type'])

# Display the final result
print("Encoded Dataset (No Filtering):")
print(df_encoded.head())
```

aspiration num-of-doors drive-wheels num-of-cylinders engine-location_86.6
engine-location_88.4 engine-location_88.6 engine-location_89.5 engine-locati
on_91.3 engine-location_93.0 engine-location_93.1 engine-location_93.3 engi
ne-location_93.7 engine-location_94.3 engine-location_94.5 engine-location_9
5.1 engine-location_95.3 engine-location_95.7 engine-location_95.9 engine-l
ocation_96.0 engine-location_96.1 engine-location_96.3 engine-location_96.5
engine-location_96.6 engine-location_96.9 engine-location_97.0 engine-locati
on_97.2 engine-location_97.3 engine-location_98.4 engine-location_98.8 engi
ne-location_99.1 engine-location_99.2 engine-location_99.4 engine-location_9
9.5 engine-location_99.8 engine-location_100.4 engine-location_101.2 engine
-location_102.0 engine-location_102.4 engine-location_102.7 engine-location_
102.9 engine-location_103.3 engine-location_103.5 engine-location_104.3 eng
ine-location_104.5 engine-location_104.9 \

1	two	convertible	front	130	False
False		True		False	False
False		False		False	False
False		False		False	False
False		False		False	False
False		False		False	False
False		False		False	False
False		False		False	False
False		False	False		False
False		False	False		False
False		False	False		False
False					

3	four	sedan	front	109	False
False		False	False		False
False		False	False		False
False		False	False		False
False		False	False		False
False		False	False		False
False		False	False		False
False		False	False		False
False		True	False		False
False		False	False		False

False		False		False		False
False						
4	four	sedan	front		136	False
False		False		False		False
False		False		False		False
False		False		False		False
False		False		False		False
False		False		False		False
False		False		False		True
False		False		False		False
False		False		False		False
False		False		False		False
False						

engine-location_105.8	engine-location_106.7	engine-location_107.9	engine-location_108.0	engine-location_109.1	engine-location_110.0	engine-location_112.0	engine-location_113.0	engine-location_114.2	engine-location_115.6	engine-location_120.9	fuel-type_std	fuel-type_turbo
0	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
True	False	False	False	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
True	False	False	False	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
True	False	False	False	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
True	False	False	False	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
False	False	False	False	False	False	False	False	False	False	False	False	False
True	False	False	False	False	False	False	False	False	False	False	False	False

In []:

In []: