```
# Question 1)
# how to import pandas and check the version
# solution
import pandas as pd
print(pd.__version__)
```

```
1.1.4
```

```
# Question 2)
# how to create aseries from a numpy array
import numpy as np
arr=np.array([1,2,3,4,5,6])
print(arr)
```

```
[1 2 3 4 5 6]
```

```
# Question 3)
# how to convert the index of a series into a column of a dataframe
import pandas as pd
df=pd.DataFrame({'RollNo':['100','101','102','103'],
                 'name':['Tarun','karthik','dheerav','akash'],
                 'marks in percentage':['92','94','96','98'],
                 'grades':['A','A','A+','A+'],
                 'subjects':['maths','social','science','english']})
print(df)
```

```
   RollNo      name  marks in percentage grades subjects
0     100     Tarun                   92      A    maths
1     101   karthik                   94      A   social
2     102  dheerav                    96     A+  science
3     103    akash                    98     A+  english
```



```
# Question 4)
# write the code to list all the datasets availabel in seaborn library
#load the mpg dataset
import seaborn as sns
mpg=sns.load_dataset('mpg')
print(mpg)
```

```
      mpg  cylinders  ...  origin                       name
0    18.0          8  ...     usa  chevrolet chevelle malibu
1    15.0          8  ...     usa          buick skylark 320
2    18.0          8  ...     usa         plymouth satellite
3    16.0          8  ...     usa              amc rebel sst
4    17.0          8  ...     usa                ford torino
..    ...        ...  ...     ...                        ...
393  27.0          4  ...     usa            ford mustang gl
394  44.0          4  ...  europe                  vw pickup
395  32.0          4  ...     usa              dodge rampage
396  28.0          4  ...     usa                ford ranger
397  31.0          4  ...     usa                 chevy s-10

[398 rows x 9 columns]
```

```
#  Question 5)
# which country origin cars are a part of this dataset
import seaborn as sns
import pandas as pd
mpg=sns.load_dataset('mpg')
df=pd.DataFrame(mpg)
df.origin.unique
```

```
<bound method Series.unique of 0         usa
1         usa
2         usa
3         usa
4         usa
        ...
393       usa
394    europe
395       usa
396       usa
397       usa
Name: origin, Length: 398, dtype: object>
```

```
# Question 6)
# extract the part of the dataframe which contains cars belonging to 'usa'
import seaborn as sns
import pandas as pd
mpg=sns.load_dataset('mpg')
df=pd.DataFrame(mpg)
df[df['origin'].str.contains("usa")]
```

Saved successfully!

			ment	horsepower	weight	acceleration	model_year	ori
0	18.0	8	307.0	130.0	3504	12.0	70	
1	15.0	8	350.0	165.0	3693	11.5	70	
2	18.0	8	318.0	150.0	3436	11.0	70	
3	16.0	8	304.0	150.0	3433	12.0	70	
4	17.0	8	302.0	140.0	3449	10.5	70	
...	...	...	...	...	...	...	...	
392	27.0	4	151.0	90.0	2950	17.3	82	

Saved successfully!