

Task - 1 Create a pandas dataframe (DataFrame name as 'df') (10 observation and 5 features)

```
d = {'Fruit':  
['Apple', 'Orange', 'Pear', 'Guava', 'Strawberry', 'Banana', 'Grapes', 'Mango',  
'Kiwi', 'Pineapple'], 'Price': [1, 2, 1, 4, 3, 2, 2, 10, 3, 8], 'Avalibility':  
['Y', 'Y', 'Y', 'Y', 'Y', 'N', 'Y', 'Y', 'Y', 'N'], 'Days to Expire':  
[6, 5, 3, 6, 8, 2, 1, 5, 8, 5], 'Colour':  
['Red', 'Orange', 'Green', 'Green', 'Red', 'Yellow', 'Green', 'Yellow', 'Brown',  
'Yellow']}
```

```
import pandas as pd
```

```
df = pd.DataFrame(d)  
df
```

	Fruit	Price	Avalibility	Days to Expire	Colour
0	Apple	1	Y	6	Red
1	Orange	2	Y	5	Orange
2	Pear	1	Y	3	Green
3	Guava	4	Y	6	Green
4	Strawberry	3	Y	8	Red
5	Banana	2	N	2	Yellow
6	Grapes	2	Y	1	Green
7	Mango	10	Y	5	Yellow
8	Kiwi	3	Y	8	Brown
9	Pineapple	8	N	5	Yellow

```
df.shape #10 observation and 5 features
```

```
(10, 5)
```

Task- 2 Check the info of 'df'

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>  
RangeIndex: 10 entries, 0 to 9  
Data columns (total 5 columns):  
#   Column                Non-Null Count  Dtype  
---  ---  
0   Fruit                 10 non-null    object  
1   Price                 10 non-null    int64  
2   Avalibility           10 non-null    object  
3   Days to Expire        10 non-null    int64  
4   Colour                 10 non-null    object  
dtypes: int64(2), object(3)  
memory usage: 528.0+ bytes
```

Task 3- Check the descriptive statistics of 'df'

```
df.describe()
```

	Price	Days to Expire
count	10.000000	10.000000
mean	3.600000	4.900000
std	3.025815	2.330951
min	1.000000	1.000000
25%	2.000000	3.500000
50%	2.500000	5.000000
75%	3.750000	6.000000
max	10.000000	8.000000

Task 4- check the 4th index observation with 'loc' slicing operator.

```
df.loc[4]
```

Fruit	Strawberry
Price	3
Avalibility	Y
Days to Expire	8
Colour	Red

Name: 4, dtype: object

Task 5 - Check the null values in your 'df'

```
df.isnull().any()
```

Fruit	False
Price	False
Avalibility	False
Days to Expire	False
Colour	False

dtype: bool

```
df.isnull().sum()
```

Fruit	0
Price	0
Avalibility	0
Days to Expire	0
Colour	0

dtype: int64