

```
import pandas as pd
import numpy as np
```

```
values= [['Kruthi',499],['Prathi',450],['Sahithi',495],
         ['Jashu',410],['Radhika',350],['Pranay',450]]
df = pd.DataFrame(values,columns=['Name','Total_Marks'])
```

```
df = df.assign(Percentage = lambda x: (x['Total_Marks'] /500 * 100))
```

```
print(df)
```

```

└─┬── Name    Total_Marks  Percentage
   0  Kruthi         499         99.8
   1  Prathi         450         90.0
   2  Sahithi        495         99.0
   3   Jashu         410         82.0
   4  Radhika        350         70.0
   5  Pranay         450         90.0
```

```
values_list = [[25, 2.5, 100], [20, 4.5, 75], [35, 5, 80],
               [45, 5.8, 90], [40, 6.8, 70], [45, 6.4, 90],
               [50, 2.6, 110]]
```

```
df = pd.DataFrame(values_list, columns=['F1', 'F2', 'F3'])
df = df.assign(Product=lambda x: (x['F1'] * x['F2'] * x['F3']))
print(df)
```

```

   F1  F2  F3  Product
0  25  2.5 100  6250.0
1  20  4.5  75  6750.0
2  35  5.0  80 14000.0
3  45  5.8  90 23490.0
4  40  6.8  70 19040.0
5  45  6.4  90 25920.0
6  50  2.6 110 14300.0
```

```
values_list = [[25, 2.5, 100], [20, 4.5, 75], [35, 5, 80],
               [45, 5.8, 90], [40, 6.8, 70], [45, 6.4, 90],
               [50, 2.6, 110]]
```

```
df = pd.DataFrame(values_list, columns=['F1', 'F2', 'F3'],
                  index=['a', 'b', 'c', 'd', 'e', 'f', 'g'])
```

```
df = df.apply(lambda x: np.square(x) if x.name == 'd' else x, axis=1)
print(df)
```

```

   F1  F2  F3
a  25.0  2.50 100.0
b  20.0  4.50  75.0
c  35.0  5.00  80.0
```

```

d  2025.0  33.64  8100.0
e   40.0   6.80   70.0
f   45.0   6.40   90.0
g   50.0   2.60  110.0

```

```

values_list = [[25, 2.5, 100], [20, 4.5, 75], [35, 5, 80],
               [45, 5.8, 90], [40, 6.8, 70], [45, 6.4, 90],
               [50, 2.6, 110]]

```

```

df = pd.DataFrame(values_list, columns=['F1', 'F2', 'F3'],
                  index=['a', 'b', 'c', 'd', 'e', 'f', 'g'])

```

```

df = df.apply(lambda x: np.square(x) if x.name in [
    'a', 'e', 'g'] else x, axis=1)

```

```
df
```

	F1	F2	F3
<b>a</b>	625.0	6.25	10000.0
<b>b</b>	20.0	4.50	75.0
<b>c</b>	35.0	5.00	80.0
<b>d</b>	45.0	5.80	90.0
<b>e</b>	1600.0	46.24	4900.0
<b>f</b>	45.0	6.40	90.0
<b>g</b>	2500.0	6.76	12100.0

```

values_list = [[25, 2.5, 100], [20, 4.5, 75], [35, 5, 80],
               [45, 5.8, 90], [40, 6.8, 70], [45, 6.4, 90],
               [50, 2.6, 110]]

```

```

df = pd.DataFrame(values_list, columns=['F1', 'F2', 'F3'],
                  index=['a', 'b', 'c', 'd', 'e', 'f', 'g'])

```

```
df = df.apply(lambda x: np.square(x) if x.name in ['b', 'f'] else x, axis=1)
```

```
df = df.assign(Product=lambda x: (x['F1'] * x['F2'] * x['F3']))
```

```
df
```

	F1	F2	F3	Product
a	25.0	2.50	100.0	6250.0
b	35.0	3.00	80.0	8400.0
d	45.0	5.80	90.0	23490.0
e	40.0	6.80	70.0	19040.0
f	2025.0	40.96	8100.0	671846400.0
g	50.0	2.60	110.0	14300.0

