In [1]:
```
import pandas as pd
import numpy as np
```

In [2]:
```
df = pd.DataFrame({"Days":["Monday","Tuesday","Wednesday","Thursday","Friday"],"ite
df
```

Out[2]:

	Days	item1	item2	item3
0	Monday	3	8	3
1	Tuesday	8	6	5
2	Wednesday	11	3	9
3	Thursday	13	9	8
4	Friday	2	2	7

In [3]:
```
np.random.seed(seed=0)
items = np.random.randint(30,size=(5,3))
items
```

Out[3]:
```
array([[12, 15, 21],
       [ 0,  3, 27],
       [ 3,  7,  9],
       [19, 21, 18],
       [ 4, 23,  6]], dtype=int32)
```

In [4]:
```
df_items = pd.DataFrame(items,
             index=["Monday","Tuesday","Wednesday","Thursday","Friday"],
             columns=["Item1 Quantity","Item2 Quantity","Item3 Quantity"])
df_items
```

Out[4]:

	Item1 Quantity	Item2 Quantity	Item3 Quantity
Monday	12	15	21
Tuesday	0	3	27
Wednesday	3	7	9
Thursday	19	21	18
Friday	4	23	6

In [5]:
```
items_price = np.array([21,29,13]).reshape(1,3)
items_price = pd.DataFrame(items_price,index=["Item Price"],
                           columns=["Item1","Item2","Item3"])
items_price
```

Out[5]:

	Item1	Item2	Item3
Item Price	21	29	13

In [6]:
```
items_price.shape,df_items.T.shape
```

Out[6]:
```
((1, 3), (3, 5))
```

In [7]:
```
t = df_items.T
```

In [10]:
```
Total_price = items_price.values.dot(t)
Total_price
```

Out[10]:
```
array([[ 960,  438,  383, 1242,  829]])
```

In [11]:
```
df_items["Total Price"] = Total_price.T
df_items
```

Out[11]:

	Item1 Quantity	Item2 Quantity	Item3 Quantity	Total Price
Monday	12	15	21	960
Tuesday	0	3	27	438
Wednesday	3	7	9	383
Thursday	19	21	18	1242
Friday	4	23	6	829