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1.Using pandas find the net worth of the stock available

```
import pandas as pd
df = pd.DataFrame({
    "A": [420, 380, 390],
    "B": [50, 40, 45]
})
df["C"] = (df["A"] * df["B"])
print(df["C"])
```

```
0    21000
1    15200
2    17550
Name: C, dtype: int64
```

2.Create a table of available items

```
import pandas as pd
data2=["DRESS","SHOES","EQUIPMENTS"]
df1=pd.DataFrame(data2,index=[1,2,3])
print("ITEMS AVAILABLE:",df1)
```

```
ITEMS AVAILABLE:    0
1      DRESS
2      SHOES
3  EQUIPMENTS
```

3.ADD ONE MORE ITEM TO THE CATEGORY TABLE

```
import pandas as pd
data2=["DRESS","SHOES","EQUIPMENTS","FURNITURE"]
df1=pd.DataFrame(data2,index=[1,2,3,4])
print("ITEMS AVAILABLE:",df1)
```

```
ITEMS AVAILABLE:    0
1      DRESS
2      SHOES
3  EQUIPMENTS
4  FURNITURE
```

4.DISPLAY THE DETAILS OF ANY ONE PARTICULAR ITEM

```
data10={'ITEMS AVAILABLE IN FURNITURE':pd.Series(["BED","CHAIR","DESK","TABLE"],index=[1,2,3,4])}
df10=pd.DataFrame(data10)
print(df10)
```

	ITEMS AVAILABLE IN FURNITURE	NO OF ITEMS AVAILABLE
1	BED	7
2	CHAIR	10
3	DESK	8
4	TABLE	6

5.Retrieve the details of item bed

```
print("Retrieving details of item Bed")
print(df10.loc[1])
```

```
Retrieving details of item Bed
ITEMS AVAILABLE IN FURNITURE    BED
NO OF ITEMS AVAILABLE          7
Name: 1, dtype: object
```

6.Display details of items chair and desk using slicing

```
df10=pd.DataFrame(data10)
print("Print the details of item chair and desk")
print(df10[1:3])
```

```
Print the details of item chair and desk
ITEMS AVAILABLE IN FURNITURE    NO OF ITEMS AVAILABLE
2                               CHAIR                  10
3                               DESK                   8
```


7.USING DEL FUNCTION REMOVE THE NO OF ITEMS COLUMN AND DISPLAY ONLY THE ITEMS PRESENT IN CATEGORY FURNITURE

```
print("PRINTING THE ITEMS AVAILABLE IN CATEGORY FURNITURE ONLY")
del df10['NO OF ITEMS AVAILABLE']
print(df10)
```

```
PRINTING THE ITEMS AVAILABLE IN CATEGORY FURNITURE ONLY
ITEMS AVAILABLE IN FURNITURE
1                               BED
2                               CHAIR
3                               DESK
4                               TABLE
```

8.Add index name for the 1st question

```
data88=["21000","15200","17550"]
Df=pd.DataFrame(data88,index=["Dress","Shoes","Equipments"])
Df
```

	0 
Dress	21000
Shoes	15200
Equipments	17550

9.Add column Name to the above table

```
Df=pd.DataFrame(data88,index=["Dress","Shoes","Equipments"],columns=["Networth"])
Df
```

	Networth
Dress	21000
Shoes	15200
Equipments	17550

10.Sort the column of clothes in alphabetical order

```
import pandas as pd

df1 = pd.DataFrame({
    'col1': ['Armani', 'Aeropostale', 'Basics', 'Zudio', 'UCB', 'Caterpillar'],
    'col2': [2, 1, 9, 8, 7, 4],
    'col3': [0, 1, 9, 4, 2, 3], })
print(df1)
print(df1.sort_values(by=['col1']))
```

	col1	col2	col3
0	Armani	2	0
1	Aeropostale	1	1
2	Basics	9	9
3	Zudio	8	4
4	UCB	7	2
5	Caterpillar	4	3
	col1	col2	col3
1	Aeropostale	1	1
0	Armani	2	0
2	Basics	9	9
5	Caterpillar	4	3

4	UCB	7	2
3	Zudio	8	4

11. Check if the DataFrame is empty or not

```
if df1.empty:
    print('DataFrame is empty!')
else:
    print('DataFrame is not empty!')

    DataFrame is not empty!
```

12. Arrange col1 and col2 in ascending order

```
print(df1.sort_values(by=['col1', 'col2']))
```

	col1	col2	col3
1	Aeropostale	1	1
0	Armani	2	0
2	Basics	9	9
5	Caterpillar	4	3
4	UCB	7	2
3	Zudio	8	4

13. Update the column name .

```
df = pd.DataFrame( {'FRUIT':['Apple','Anar','Butterfruit','Orange','Mango','Banana'], 'KG':[10.0,20.0,8.5,25.0,14.0,26.0]} )
print(df)
print(df.rename(columns = {'FRUIT':'Fruit Name'}))
```

	FRUIT	KG
0	Apple	10.0
1	Anar	20.0
2	Butterfruit	8.5
3	Orange	25.0
4	Mango	14.0
5	Banana	26.0

	Fruit Name	KG
0	Apple	10.0
1	Anar	20.0
2	Butterfruit	8.5
3	Orange	25.0
4	Mango	14.0
5	Banana	26.0

14. Update the quantity of banana

```
df.loc[5, ['KG']] = [19]
print(df)
```

	FRUIT	KG
0	Apple	10.0
1	Anar	20.0
2	Butterfruit	8.5
3	Orange	25.0
4	Mango	14.0
5	Banana	19.0

15.Create a Dataframe with series

```
data10={"Cost":pd.Series([450,4800,350],index=["Dress","Shoes","Equipments"]), "Qty":pd.Series
df7=pd.DataFrame(data10)
df7
```

	Cost	Qty
Dress	450	28
Shoes	4800	14
Equipments	350	56

16.Select a Particular element and display

```
df14=pd.DataFrame(data10)
print(df14.loc["Equipments"])

Cost      350
Qty        56
Name: Equipments, dtype: int64
```

17.Slicing in DataFrame

```
df14=pd.DataFrame(data10)
print("Details from Dress and Shoes")
print(df14[0:2])
```

Details from Dress and Shoes		
	Cost	Qty
Dress	450	28
Shoes	4800	14

18.Delete a particular Element

```
df14=df14.drop("Equipments")
df14
```

	Cost	Qty
Dress	450	28
Shoes	4800	14

19.Add a particular element.

```
df14.loc[len(df.index)] = [89, 93]
df14
```

	Cost	Qty
Dress	450	28
Shoes	4800	14
6	89	93

20.Print the table

```
df7
```

	FRUIT	KG
0	Apple	10.0
1	Anar	20.0
2	Butterfruit	8.5
3	Orange	25.0
4	Mango	14.0
5	Banana	26.0

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