In [ ]:
```
# task a
```

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

In [2]:
```
data={ 'employee' : ['john','alice','bob','emma'],
       'department' : ['IT','HR','Finance','IT'],
       'salary' : [60000,55000,70000,72000],
       'age' : [30,28,35,32]
     }
df=pd.DataFrame(data)
```

In [3]:
```
df
```

Out[3]:

	employee	department	salary	age
0	john	IT	60000	30
1	alice	HR	55000	28
2	bob	Finance	70000	35
3	emma	IT	72000	32

In [5]:
```
#1. Display the first two rows
print("display two rows from the dataframe :")
print(df.head(2))
```

```
display two rows from the dataframe :
  employee department  salary  age
0     john         IT   60000   30
1    alice         HR   55000   28
```

In [6]:
```
#2. Add a new column "Experience" with values[5,3,7,6]
df['experience']=[5,3,7,6]
print("after adding the new coulum in dataframe : ")
print(df)
```

```
after adding the new coulum in dataframe :
  employee department  salary  age  experience
0     john         IT   60000   30           5
1    alice         HR   55000   28           3
2      bob    Finance   70000   35           7
3     emma         IT   72000   32           6
```

In [7]:
```
#3. Find the average salary of all employees
avg_salary = df['salary'].mean()
print("average salary of all employess are: ",avg_salary)
```

```
average salary of all employess are:  64250.0
```

In [ ]:
```
# task b
```

In [8]:
```
data_student={ 'Name' : ['Ruchi','Dev','Rohit','niyati'],
               'Maths' : [90,88,85,82],
               'Science' : [92,91,58,63],
               'English' : [89,83,60,79]
     }
```

```
df_student=pd.DataFrame(data_student)
df_student
```

Out[8]:

	Name	Maths	Science	English
0	Ruchi	90	92	89
1	Dev	88	91	83
2	Rohit	85	58	60
3	niyati	82	63	79

In [15]:
```
#1. Display all students who scored more than 80 in math
score_above_80 = df_student[df_student['Maths'] > 80]
print("students who scored more than 80 in maths are :")
print(score_above_80)
```

```
students who scored more than 80 in maths are :
     Name  Maths  Science  English
0   Ruchi     90       92       89
1     Dev     88       91       83
2   Rohit     85       58       60
3  niyati     82       63       79
```

In [16]:
```
#2. Sort the dataframe in descending order based on science scores
sorted_std= df_student.sort_values(by='Science',ascending=False)
print(" Dataframes sorted by science scores in descending order : ")
print(sorted_std)
```

```
 Dataframes sorted by science scores in descending order :
     Name  Maths  Science  English
0   Ruchi     90       92       89
1     Dev     88       91       83
3  niyati     82       63       79
2   Rohit     85       58       60
```

In [25]:
```
#3. Find the student with the higest english score
top_std_english= df_student[df_student['English'] > 85]
print("student with the higest english score : ")
print(top_std_english)
```

```
student with the higest english score :
    Name  Maths  Science  English
0  Ruchi     90       92       89
```