

## Experiment - 1

AIM: To execute Pandas program to select distinct department ID from employees file.

Pseudocode:

- 1) Import the Pandas Library as pd
- 2) Create a dictionary called 'data' with the following keys & corresponding list of values.
  - 'Dept-id'
  - 'Dept-name'
  - 'Manager-id'
  - 'location-id'
- 3) Create Dataframe 'df' from the 'data' dictionary
- 4) Print the string 'distinct department: '

Sample input:

Employees database (Dept-id, dept-name)

Sample output:

Distinct department id;

0	10
1	
2	20
3	30
4	40

Result: Therefore the Pandas program to select dept ID executed successfully.



```
import pandas as pd
data={
    'DEPT_ID' : [10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270],
    'DEPT_NAME' : ['Administration', 'Marketing', 'Purchasing', 'Human Resources', 'Shipping', 'IT', 'Public Relations', 'Sales', 'Executive', 'Finance', 'Accounting', 'Treasury', 'Corporate'],
    'MANAGER_ID': [200, 201, 114, 203, 121, 103, 204, 145, 100, 108, 205, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0],
    'LOCATION_ID': [1700, 1800, 1700, 2400, 1500, 1400, 2700, 2500, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700, 1700]
}
df=pd.DataFrame(data)
dist_dept_id=df['DEPT_ID'].unique()
print(dist_dept_id)
```

```
IDLE Shell 3.12.4
File Edit Shell Debug Options Window Help
Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/abhip/OneDrive/Documents/DSA05 LAB/program 1.py
[ 10  20  30  40  50  60  70  80  90 100 110 120 130 140 150 160 170 180
 190 200 210 220 230 240 250 260 270]
>>>
```