

**Aim:** To execute pandas program to select distinct department id from employees file

**pseudo code:**

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'

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 20

2 30

3 40

**Result:** Therefore the pandas program to select the 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, 143, 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]
>>>
```