Program List Python DataFrame for Practical PDF provides 30 practical questions for CBSE Informatics Practices Class XII. If you missed the notes, you can read from below given links:

- Create DataFrame
- Iterate, add rows & columns
- Select and Access Data
- Delete rows and columns
- Head(), Tail(), Rename() functions

Program List Python DataFrame on Dataframe Creation

The following section contains a Program List Python DataFrame based Dataframe Creation.

Write a program to:

1 Create an empty dataframe named as empty_df**.**

```
import pandas as pd

empty_df = pd.DataFrame()

print(empty_df)
```

2 Create a dataframe named as students **using a list of names of 5 students.**

```
import pandas as pd

students = ["Ram","Aman","Akash","Ramesh","Virat"]

students = pd.DataFrame(students,columns=["Name"])

print(students)
```

3 Write a program to create a dataframe players **using a list of names ans scores of the previous three matches.**

Using Nested List

```
import pandas as pd

data = [["Virat",55,66,31],["Rohit",88,66,43],["Samson",99,101,68]]

players = pd.DataFrame(data, columns = ["Name","Match-1","Match-2","Match-3"])

print(players)
```

Using Dictionary:

```
import pandas as pd

data = {"Virat":[55,66,31],"Rohit":[88,66,43],"Samson":[99,101,68]}

players = pd.DataFrame(data,columns = ["Name","Match-1","Match-2","Match-3"])

print(players)
```

4 Write a program to create a dataframe salesman **using the series sales_person which stored saleman names and quantity of sales of previous month.**

```
import pandas as pd

sales_person = [["Ram",55],["Ajay",22],["Vijay",67],["Sachin",44]]

salesman = pd.DataFrame(sales_person,columns=["Name","Sales(August)"])

print(salesman)
```

5 Write a program to create a dataframe countries **using a dictionary which stored country name, capitals and populations of the country.**

```
import pandas as pd

country_data = {"Country Name":["India","Canada","Australia"],

        "Capital": ["New Delhi","Ottawa","Canberra"],

        "Population" : ["136 Cr","10 Cr","50 Cr"]

}

countries = pd.DataFrame(country_data)

print(countries)
```

6 Write a program to create a dataframe df_nda **ndArray that stores letters and words starting from 'g' to 'p'. (The first column stores letter and the second column stores the words starting with that letter.)**

Do yourself.

Program List Python DataFrame based on iterrows() and iteritems()

7 Iterate dataframe created in question no. 3 by its rows.

```
import pandas as pd


data = [["Virat",55,66,31],["Rohit",88,66,43],["Samson",99,101,68]]

players = pd.DataFrame(data, columns = ["Name","Match-1","Match-2","Match-3"])

for index, row in players.iterrows():

    print(index, row.values)
```

8 Iterate dataframe created in question no. 4 by its columns.

```
import pandas as pd

sales_person = [["Ram",55],["Ajay",22],["Vijay",67],["Sachin",44]]

salesman = pd.DataFrame(sales_person,columns=["Name","Sales(August)"])

for index, row in salesman.iterrows():

    print(index, row["Name"],row["Sales(August)"])
```

9 Print scores of previous two matches along with their names using iterrows function. (Use dataframe created in question 3)

```
import pandas as pd

data = [["Virat",55,66,31],["Rohit",88,66,43],["Samson",99,101,68]]

players = pd.DataFrame(data, columns = ["Name","Match-1","Match-2","Match-3"])

for index, row in players.iterrows():

    print(index, row["Name"],row["Match-2"],row["Match-3"])
```

Click here for dataframe programs

See this also: Assignment

If you enjoyed this collections of programs, you can read full contents from below given links
Click here to get our IP contents:

Informatics Practices Class XII | Computer Science Class XII

Thank you very much for using this pdf