Pandas

Creating Data Frames

1.) Data Frame – 1

```
import pandas as pd

data1 = {
   "name" : ["raju","ravi","kiran","deepu","rahul","sreeja","vinay","deepak","neha","karan"],
   "age"  : [22,24,20,21,25,20,22,23,22,23],
   "loc"  :
["hyd","chennai","banglore","delhi","hyd","pune","bombay","delhi","chennai","hyd"],
   "course" : ["cse","it","aiml","cse","ece","csd","aiml","ece","it","cse"],
   "year"  :  [2023,2025,2024,2022,2023,2022,2025,2024,2025,2024]



}

df1 = pd.DataFrame(data1)

print(df1)
```

OUTPUT :

1 ravi 24 chennai it 2025

2 kiran 20 banglore aiml 2024

3 deepu 21 delhi cse 2022

4 rahul 25 hyd ece 2023

5 sreeja 20 pune csd 2022

6 vinay 22 bombay aiml 2025

7 deepak 23 delhi ece 2024

8 neha 22 chennai it 2025

9 karan 23 hyd cse 2024

2.) Data Frame – 2

```
df2 = pd.DataFrame({
  "CustomerID": [101,102,103,104,105,106,107,108,109,110,
           111,112,113,114,115,116,117,118,119,120],
  "Name": [
    "Rahul Sharma","Ananya Verma","Kiran Reddy","Priya Singh","Amit Patel",
    "Sneha Iyer","Vikas Rao","Neha Kapoor","Rohit Mehra","Divya Nair",
    "Arjun Das","Meera Joshi","Sandeep Jain","Pooja Shah","Mahesh Gowda",
    "Shreya Kulkarni","Harish Yadav","Nisha Gupta","Ravi Teja","Lakshmi Devi"
  ],
  "City": [
    "Delhi","Mumbai","Hyderabad","Chennai","Ahmedabad",
    "Bengaluru","Pune","Kolkata","Jaipur","Surat",
    "Indore","Bhopal","Visakhapatnam","Kochi","Nagpur",
    "Patna","Lucknow","Mysore","Noida","Thane"
  ],
  "Age": [25,28,30,27,32,26,29,33,24,31,34,22,35,30,28,26,33,29,24,27],
  "Gender": [
    "Male","Female","Male","Female","Male",
    "Female","Male","Female","Male","Female",
    "Male","Female","Male","Female","Male",
    "Female","Male","Female","Male","Female"
  ]
})

print(df2)
```

OUTPUT

	CustomerID	Name	City	Age	Gender
0	101	Rahul Sharma	Delhi	25	Male
1	102	Ananya Verma	Mumbai	28	Female
2	103	Kiran Reddy	Hyderabad	30	Male
3	104	Priya Singh	Chennai	27	Female
4	105	Amit Patel	Ahmedabad	32	Male
5	106	Sneha Iyer	Bengaluru	26	Female
6	107	Vikas Rao	Pune	29	Male

7	108	Neha Kapoor	Kolkata	33	Female
8	109	Rohit Mehra	Jaipur	24	Male
9	110	Divya Nair	Surat	31	Female
10	111	Arjun Das	Indore	34	Male
11	112	Meera Joshi	Bhopal	22	Female
12	113	Sandeep Jain	Visakhapatnam	35	Male
13	114	Pooja Shah	Kochi	30	Female
14	115	Mahesh Gowda	Nagpur	28	Male
15	116	Shreya Kulkarni	Patna	26	Female
16	117	Harish Yadav	Lucknow	33	Male
17	118	Nisha Gupta	Mysore	29	Female
18	119	Ravi Teja	Noida	24	Male
19	120	Lakshmi Devi	Thane	27	Female

3.) Data Frame – 3

```
df3 = pd.DataFrame({
   "PurchaseID": [201,202,203,204,205,206,207,208,209,210,
                  211,212,213,214,215,216,217,218,219,220],
   "CustomerName": [
      "Rahul Sharma","Ananya Verma","Kiran Reddy","Priya Singh","Amit Patel",
      "Sneha Iyer","Vikas Rao","Neha Kapoor","Rohit Mehra","Divya Nair",
      "Arjun Das","Meera Joshi","Sandeep Jain","Pooja Shah","Mahesh Gowda",
      "Shreya Kulkarni","Harish Yadav","Nisha Gupta","Ravi Teja","Lakshmi Devi"
   ],
   "Product": [
      "iPhone 15","Samsung Galaxy S23","Dell Inspiron Laptop","Sony
Headphones","Nike Shoes",
      "LG Washing Machine","HP Pavilion Laptop","Adidas Hoodie","Apple
AirPods","Mi Smart Watch",
      "Canon DSLR","Lenovo ThinkPad","Boat Speaker","Puma Shoes","Whirlpool
Fridge",
      "Oppo Mobile","Samsung TV","Fastrack Watch","Realme Mobile","JBL Earbuds"
   ],
   "Category": [
      "Mobile","Mobile","Laptop","Accessories","Footwear",
      "Home Appliance","Laptop","Clothing","Accessories","Wearable",
      "Camera","Laptop","Audio","Footwear","Home Appliance",
      "Mobile","TV","Wearable","Mobile","Audio"
   ],
   "Price": [
      79999, 74999, 58000, 2999, 4500,
      32000, 65000, 2500, 15000, 3999,
```

```
        45000, 72000, 1800, 4200, 51000,
        19000, 46000, 2500, 16000, 2999
    ]
})

print(df3)
```

OUTPUT

	PurchaseID	CustomerName	Product	Category	Price
0	201	Rahul Sharma	iPhone 15	Mobile	79999
1	202	Ananya Verma	Samsung Galaxy S23	Mobile	74999
2	203	Kiran Reddy	Dell Inspiron Laptop	Laptop	58000
3	204	Priya Singh	Sony Headphones	Accessories	2999
4	205	Amit Patel	Nike Shoes	Footwear	4500
5	206	Sneha Iyer	LG Washing Machine	Home Appliance	32000
6	207	Vikas Rao	HP Pavilion Laptop	Laptop	65000
7	208	Neha Kapoor	Adidas Hoodie	Clothing	2500
8	209	Rohit Mehra	Apple AirPods	Accessories	15000
9	210	Divya Nair	Mi Smart Watch	Wearable	3999
10	211	Arjun Das	Canon DSLR	Camera	45000
11	212	Meera Joshi	Lenovo ThinkPad	Laptop	72000
12	213	Sandeep Jain	Boat Speaker	Audio	1800
13	214	Pooja Shah	Puma Shoes	Footwear	4200
14	215	Mahesh Gowda	Whirlpool Fridge	Home Appliance	51000
15	216	Shreya Kulkarni	Oppo Mobile	Mobile	19000
16	217	Harish Yadav	Samsung TV	TV	46000
17	218	Nisha Gupta	Fastrack Watch	Wearable	2500
18	219	Ravi Teja	Realme Mobile	Mobile	16000
19	220	Lakshmi Devi	JBL Earbuds	Audio	2999