

# Experiment - 1 Random Sampling Using Pandas

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

job_roles = ["DevOps", "Marketing", "Production", "Data Engineer", "Scrum Master", "Backend Developer"]
employee = [f"Emp{i}" for i in range(1, 21)]
role = [random.choice(job_roles) for i in range(1, 21)]
salary = [random.randint(20000, 200000) for i in range(1, 21)]

df = pd.DataFrame({
    "Employee Name": employee,
    "Role": role,
    "Salary": salary
})

df
```

Out[1]:

	Employee Name	Role	Salary
0	Emp1	Data Engineer	157376
1	Emp2	Scrum Master	98670
2	Emp3	Marketing	100079
3	Emp4	Backend Developer	55601
4	Emp5	DevOps	144336
5	Emp6	Marketing	96037
6	Emp7	Scrum Master	136100
7	Emp8	Production	160004
8	Emp9	Backend Developer	143945
9	Emp10	Backend Developer	199660
10	Emp11	Scrum Master	177420
11	Emp12	Backend Developer	86975
12	Emp13	Backend Developer	136481
13	Emp14	Scrum Master	36823
14	Emp15	Scrum Master	86084
15	Emp16	DevOps	144015
16	Emp17	Scrum Master	65612
17	Emp18	Data Engineer	76257
18	Emp19	Backend Developer	142344
19	Emp20	DevOps	140890

## DataFrame:

**DataFrame()** is a object that gets an argument as a Dict to create table like structure

```
In [3]: # Sample Size n = 3 --> Three Samples

df.sample(n=3)
```

Out[3]:

	Employee Name	Role	Salary
19	Emp20	DevOps	140890
4	Emp5	DevOps	144336
13	Emp14	Scrum Master	36823