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In [3]: # let us import the Pandas Library
import pandas as pd
```

```
In [4]: #In this practice lab, we will learn how to create a DataFrame out of a dictionary.
#Let us consider a dictionary 'x' with keys and values as shown below.

#We then create a dataframe from the dictionary using the function pd.DataFrame(dict)
#Define a dictionary 'x'

x = {'Name': ['Rose', 'John', 'Jane', 'Mary'], 'ID': [1, 2, 3, 4], 'Department': ['Architect Group', 'Software Group', 'Design Team', 'Infrastructure'],
      'Salary':[100000, 80000, 50000, 60000]}

#casting the dictionary to a DataFrame
df = pd.DataFrame(x)

#display the result df
df
```

Out[4]:

| | Name | ID | Department | Salary |
|---|------|----|-----------------|--------|
| 0 | Rose | 1 | Architect Group | 100000 |
| 1 | John | 2 | Software Group | 80000 |
| 2 | Jane | 3 | Design Team | 50000 |
| 3 | Mary | 4 | Infrastructure | 60000 |

```
In [6]: #Column Selection:¶
#To select a column in Pandas DataFrame, we can either access the columns by calling them by their columns name.

#Let's Retrieve the data present in the ID column.

x= df[['ID']]
x
```

Out[6]:

| | ID |
|---|----|
| 0 | 1 |
| 1 | 2 |
| 2 | 3 |
| 3 | 4 |

```
In [8]: #check the type of x
type(x)
```

Out[8]: pandas.core.frame.DataFrame

```
In [10]: #Access to multiple columns
#Let us retrieve the data for Department, Salary and ID columns
x= df[['Department', 'Salary', 'ID']]
x
```

Out[10]:

| | Department | Salary | ID |
|---|-----------------|--------|----|
| 0 | Architect Group | 100000 | 1 |
| 1 | Software Group | 80000 | 2 |
| 2 | Design Team | 50000 | 3 |
| 3 | Infrastructure | 60000 | 4 |

```
In [ ]:
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