Create Dataframes using dynamic column list on CSV Data

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

# creating a data frame
df = pd.read_csv("Bibadata.csv")
print(df.head())
```

```
  Product  Age  Gender  Education MaritalStatus  Usage  Fitness  Income  Miles
0   TM195   18    Male         14        Single      3        4   29562    112
1   TM195   19    Male         15        Single      2        3   31836     75
2   TM195   19  Female         14     Partnered      4        3   30699     66
3   TM195   19    Male         12        Single      3        3   32973     85
4   TM195   20    Male         13     Partnered      4        2   35247     47
```

```
C:\Users\Abhishek\AppData\Local\Temp\ipykernel_52844\751282765.py:1: DeprecationWarning:
Pyarrow will become a required dependency of pandas in the next major release of pandas (pandas 3.0),
(to allow more performant data types, such as the Arrow string type, and better interoperability with other libraries)
but was not found to be installed on your system.
If this would cause problems for you,
please provide us feedback at https://github.com/pandas-dev/pandas/issues/54466

  import pandas as pd
```

In [2]:
```
# Python program to illustrate
# creating a data frame using CSV files

# import pandas module
import pandas as pd
# import csv module
import csv

with open("Bibadata.csv") as csv_file:
    # read the csv file
    csv_reader = csv.reader(csv_file)

    # now we can use this csv files into the pandas
    df = pd.DataFrame([csv_reader], index = None)

# iterating values of first column
for val in list(df[1]):
    print(val)
```

```
['TM195', '18', 'Male', '14', 'Single', '3', '4', '29562', '112']
```

In [3]:
```
# importing pandas

import pandas as pd

# Creating dataframe a
a = pd.DataFrame()

# Creating Dictionary
d = {'id': [1, 2, 10, 12],
     'val1': ['a', 'b', 'c', 'd']}

a = pd.DataFrame(d)

# printing the dataframe
a
```

Out[3]:

	id	val1
0	1	a
1	2	b
2	10	c
3	12	d

In [4]:
```
# importing pandas
import pandas as pd

# Creating dataframe b
b = pd.DataFrame()

# Creating dictionary
d = {'id': [1, 2, 9, 8],
     'val1': ['p', 'q', 'r', 's']}
b = pd.DataFrame(d)

# printing the dataframe
b
```

Out[4]:

	id	val1
0	1	p
1	2	q
2	9	r
3	8	s

In [5]:
```
# importing pandas
import pandas as pd

# Creating dataframe a
a = pd.DataFrame()

# Creating Dictionary
```

```
d = {'id': [1, 2, 10, 12],
     'val1': ['a', 'b', 'c', 'd']}

a = pd.DataFrame(d)

# Creating dataframe b
b = pd.DataFrame()

# Creating dictionary
d = {'id': [1, 2, 9, 8],
     'val1': ['p', 'q', 'r', 's']}
b = pd.DataFrame(d)

# inner join
df = pd.merge(a, b, on='id', how='inner')

# display dataframe
df
```

Out[5]:

	id	val1_x	val1_y
0	1	a	p
1	2	b	q

In [8]:

```
# importing pandas
import pandas as pd

# Creating dataframe a
a = pd.DataFrame()

# Creating Dictionary
d = {'id': [1, 2, 10, 12],
     'val1': ['a', 'b', 'c', 'd']}

a = pd.DataFrame(d)

# Creating dataframe b
b = pd.DataFrame()
 # Creating dictionary
d = {'id': [1, 2, 9, 8],
     'val1': ['p', 'q', 'r', 's']}
b = pd.DataFrame(d)

# left outer join
df = pd.merge(a, b, on='id', how='left')

# display dataframe
df
```

Out[8]:

	id	val1_x	val1_y
0	1	a	p
1	2	b	q
2	10	c	NaN
3	12	d	NaN

In [9]:

```
# importing pandas
import pandas as pd

# Creating dataframe a
a = pd.DataFrame()

# Creating Dictionary
d = {'id': [1, 2, 10, 12],
     'val1': ['a', 'b', 'c', 'd']}

a = pd.DataFrame(d)

# Creating dataframe b
b = pd.DataFrame()

# Creating dictionary
d = {'id': [1, 2, 9, 8],
     'val1': ['p', 'q', 'r', 's']}
b = pd.DataFrame(d)

# right outer join
df = pd.merge(a, b, on='id', how='right')

# display dataframe
df
```

Out[9]:

	id	val1_x	val1_y
0	1	a	p
1	2	b	q
2	9	NaN	r
3	8	NaN	s

In [10]:

```
# importing pandas
import pandas as pd

# Creating dataframe a
a = pd.DataFrame()

# Creating Dictionary
d = {'id': [1, 2, 10, 12],
     'val1': ['a', 'b', 'c', 'd']}

a = pd.DataFrame(d)

# Creating dataframe b
b = pd.DataFrame()
```

```
# Creating dictionary
d = {'id': [1, 2, 9, 8],
     'val1': ['p', 'q', 'r', 's']}
b = pd.DataFrame(d)

# full outer join
df = pd.merge(a, b, on='id', how='outer')

# display dataframe
df
```

Out[10]:

	id	val1_x	val1_y
0	1	a	p
1	2	b	q
2	8	NaN	s
3	9	NaN	r
4	10	c	NaN
5	12	d	NaN

In [11]:
```
# importing pandas
import pandas as pd

# Creating dataframe a
a = pd.DataFrame()

# Creating Dictionary
d = {'id': [1, 2, 10, 12],
     'val1': ['a', 'b', 'c', 'd']}

a = pd.DataFrame(d)

# Creating dataframe b
b = pd.DataFrame()

# Creating dictionary
d = {'id': [1, 2, 9, 8],
     'val1': ['p', 'q', 'r', 's']}
b = pd.DataFrame(d)

# index join
df = pd.merge(a, b, left_index=True, right_index=True)
```

In [12]:
```
df
```

Out[12]:

	id_x	val1_x	id_y	val1_y
0	1	a	1	p
1	2	b	2	q
2	10	c	9	r
3	12	d	8	s

In [ ]:
```

```