



Create a Pandas DataFrame from Lists



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Python is a great language for doing data analysis, primarily because of the fantastic ecosystem of data-centric python packages. Pandas is one of those packages and makes importing and analyzing data much easier.

Creating Pandas Dataframe can be achieved in multiple ways. Let's see how can we create a Pandas DataFrame from Lists.

Creating a Pandas DataFrame From Lists | GeeksforGeeks

Code #1: Basic example

```
import pandas as pd

# list of strings
lst = ['Geeks', 'For', 'Geeks', 'is',
       'portal', 'for', 'Geeks']

# Calling DataFrame constructor on list
df = pd.DataFrame(lst)
df
```

Output:

| | 0 |
|---|--------|
| 0 | Geeks |
| 1 | For |
| 2 | Geeks |
| 3 | is |
| 4 | portal |
| 5 | for |
| 6 | Geeks |

Code #2: Dataframe using list with index and column names

```
# import pandas as pd
import pandas as pd

# list of strings
lst = ['Geeks', 'For', 'Geeks', 'is', 'portal', 'for', 'Geeks']

# Calling DataFrame constructor on list
# with indices and columns specified
df = pd.DataFrame(lst, index=['a', 'b', 'c', 'd', 'e', 'f', 'g'],
                  columns=['Names'])

df
```

Output:

| Names | |
|----------|--------|
| a | Geeks |
| b | For |
| c | Geeks |
| d | is |
| e | portal |
| f | for |
| g | Geeks |

Code #3: Using zip() for zipping two lists

```
# import pandas as pd
import pandas as pd

# list of strings
lst = ['Geeks', 'For', 'Geeks', 'is', 'portal', 'for', 'Geeks']

# list of int
lst2 = [11, 22, 33, 44, 55, 66, 77]
```

Data Types Control Flow Functions List String Set Tuple Dictionary Oops Exception Handling

```
# Calling DataFrame constructor after zipping
# both lists, with columns specified
df = pd.DataFrame(list(zip(lst, lst2)),
                   columns = ['Name', 'val'])

df
```

Output:

| | Name | val |
|---|--------|-----|
| 0 | Geeks | 11 |
| 1 | For | 22 |
| 2 | Geeks | 33 |
| 3 | is | 44 |
| 4 | portal | 55 |
| 5 | for | 66 |
| 6 | Geeks | 77 |

Code #4: Creating DataFrame using multi-dimensional list

```
# import pandas as pd
import pandas as pd

# List1
lst = [['tom', 25], ['krish', 30],
       ['nick', 26], ['juli', 22]]

df = pd.DataFrame(lst, columns=['Name', 'Age'])
df
```

Output:

| | Name | Age |
|---|-------|-----|
| 0 | tom | 25 |
| 1 | krish | 30 |
| 2 | nick | 26 |
| 3 | juli | 22 |

```
# import pandas as pd
import pandas as pd

# List1
lst = [['tom', 'reacher', 25], ['krish', 'pete', 30],
       ['nick', 'wilson', 26], ['juli', 'williams', 22]]

df = pd.DataFrame(lst, columns=['FName', 'LName', 'Age'], dtype = float)
df
```

Output:

| | FName | LName | Age |
|---|-------|----------|------|
| 0 | tom | reacher | 25.0 |
| 1 | krish | pete | 30.0 |
| 2 | nick | wilson | 26.0 |
| 3 | juli | williams | 22.0 |

Code #6: Using lists in dictionary to create dataframe

```
# importing pandas as pd
import pandas as pd

# list of name, degree, score
nme = ["aparna", "pankaj", "sudhir", "Geeku"]
deg = ["MBA", "BCA", "M.Tech", "MBA"]
scr = [90, 40, 80, 98]

# dictionary of lists
dict = {'name': nme, 'degree': deg, 'score': scr}

df = pd.DataFrame(dict)

df
```

| | name | degree | score |
|---|--------|--------|-------|
| 0 | aparna | MBA | 90 |
| 1 | pankaj | BCA | 40 |
| 2 | sudhir | M.Tech | 80 |
| 3 | Geeku | MBA | 98 |

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