

Create objects, DataFrames and Series in Python using Pandas

Creating Objects in Python

Creating a basic object:

```
In [1]: class Dog:
        def __init__(self, name, age):
            self.name = name
            self.age = age

        def bark(self):
            return f"{self.name} says woof!"

# Creating an instance of Dog
my_dog = Dog(name="Buddy", age=5)
print(my_dog.bark())
```

Buddy says woof!

Creating a Pandas DataFrame

Creating a DataFrame from a dictionary:

```
In [2]: import pandas as pd

# Creating a dictionary
data = {
    'Name': ['Alice', 'Bob', 'Charlie'],
    'Age': [25, 30, 35],
    'City': ['New York', 'Los Angeles', 'Chicago']
}

# Creating a DataFrame
df = pd.DataFrame(data)
print(df)
```

	Name	Age	City
0	Alice	25	New York
1	Bob	30	Los Angeles
2	Charlie	35	Chicago

Creating a DataFrame from a list of lists:

```
In [3]: # Creating a list of lists
data = [
    ['Alice', 25, 'New York'],
    ['Bob', 30, 'Los Angeles'],
    ['Charlie', 35, 'Chicago']
]

# Creating a DataFrame with column names
df = pd.DataFrame(data, columns=['Name', 'Age', 'City'])
print(df)
```

	Name	Age	City
0	Alice	25	New York
1	Bob	30	Los Angeles
2	Charlie	35	Chicago

Creating a Pandas Series

Creating a Series from a list:

```
In [4]: # Creating a Series from a list
data = [10, 20, 30, 40, 50]
series = pd.Series(data)
print(series)
```

```
0    10
1    20
2    30
3    40
4    50
dtype: int64
```

Creating a Series from a dictionary:

```
In [5]: # Creating a dictionary
data = {'a': 10, 'b': 20, 'c': 30}

# Creating a Series from the dictionary
series = pd.Series(data)
print(series)
```

```
a    10
b    20
c    30
dtype: int64
```

```
In [ ]:
```

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