

**Aim:**

Write a Python program to add, subtract, multiple and divide two Pandas Series.

**Explanation**

1. **Addition:** Adding two Pandas Series involves adding the corresponding elements together. In this example, `s1` and `s2` are added element-wise, meaning the first element of `s1` is added to the first element of `s2`, the second element of `s1` is added to the second element of `s2`, and so on. The result is a new Series `addition` containing the summed values.
2. **Subtraction:** Subtracting two Pandas Series follows a similar logic as addition. Each element of `s2` is subtracted from the corresponding element of `s1`. The result is a new Series `subtraction` containing the subtracted values.
3. **Multiplication:** Multiplying two Pandas Series involves multiplying the corresponding elements together. Each element of `s1` is multiplied by the corresponding element of `s2`. The result is a new Series `multiplication` containing the multiplied values.
4. **Division:** Dividing two Pandas Series follows a similar pattern. Each element of `s1` is divided by the corresponding element of `s2`. The result is a new Series `division` containing the division results.

By performing these operations, we can manipulate and combine data in Pandas Series to obtain new Series with transformed values based on arithmetic operations.

**Source Code:****PandasSeries.py**

```
import pandas as pd

# Create two Pandas Series
s1 = pd.Series([1, 2, 3, 4, 5])
s2 = pd.Series([6, 7, 8, 9, 10])

# Write code below to perform addition
print("Addition:")
c=s1+s2
print(c)

# Write code below to perform subtraction

# Write code below to perform multiplication

# Write code below to perform division

print("Subtraction:")
d=s1-s2
print(d)
# Write code below to perform multiplication
print("Multiplication:")
e=s1*s2
print(e)
# Write code below to perform division
print("Division:")
```

```
f=s1/s2  
print(f)
```

### Execution Results - All test cases have succeeded!

Test Case - 1	
User Output	
Addition:	
0	7
1	9
2	11
3	13
4	15
dtype: int64	
Subtraction:	
0	-5
1	-5
2	-5
3	-5
4	-5
dtype: int64	
Multiplication:	
0	6
1	14
2	24
3	36
4	50
dtype: int64	
Division:	
0	0.166667
1	0.285714
2	0.375000
3	0.444444
4	0.500000
dtype: float64	