

**Activity 2.4**

Draw two tables for subtraction similar to tables 2.2 and 2.3 showing the changes in the series elements and corresponding output without replacing the missing values, and after replacing the missing values with 1000.

```
>>> seriesA.add(seriesB, fill_value=0)
```

```
a      -9.0
b       2.0
c     -47.0
d       4.0
e     105.0
y      20.0
z      10.0
dtype: float64
```

Table 2.3 Details of addition of two series using add() method

index	value from seriesA	value from seriesB	seriesA + seriesB
a	1	-10	-9.0
b	2	0	2.0
c	3	-50	-47.0
d	4	0	4.0
e	5	100	105.00
y	0	20	20.0
z	0	10	10.0

Note that Table 2.2 shows the changes in the series elements and corresponding output without replacing the missing values, while Table 2.3 shows the changes in the series elements and corresponding output after replacing missing values by 0. Just like addition, subtraction, multiplication and division can also be done using corresponding mathematical operators or explicitly calling of the appropriate method.

(B) Subtraction of two Series

Again, it can be done in two different ways, as shown in the following examples:

**Activity 2.5**

Draw two tables for multiplication similar to Tables 2.2 and 2.3 showing the changes in the series elements and corresponding output without replacing the missing values, and after replacing the missing values with 0.

```
>>> seriesA - seriesB #using subtraction operator
```

```
a      11.0
b      NaN
c      53.0
d      NaN
e     -95.0
y      NaN
z      NaN
dtype: float64
```

Let us now replace the missing values with 1000 before subtracting seriesB from seriesA using explicit subtraction method sub().