```
46  import pandas as pd
```

```
47  s = pd.Series(
        [1, None, None, 2]
    )
    s
```

```
47  0    1.0
    1    NaN
    2    NaN
    3    2.0
    dtype: float64
```

```
48  # s.fillna(0)
```

```
49  # s.fillna({0: 100, 1: 200})
```

```
50  s1 = pd.Series(
        {0: 100, 1: 200, 2: 300})
    s1
```

```
50  0    100
    1    200
    2    300
    dtype: int64
```

```
51  s.fillna(s1)
```

```
51  0      1.0
    1    200.0
    2    300.0
    3      2.0
    dtype: float64
```

```
52  s.fillna(method='ffill')
```

```
52  0    1.0
    1    1.0
    2    1.0
    3    2.0
    dtype: float64
```

```
53  s.fillna(method='bfill')
```

```
53  0    1.0
    1    2.0
    2    2.0
    3    2.0
    dtype: float64
```

```
54  df1 = pd.read_excel(
        'fillna.xlsx'
    )
    df1
```

54

	A	B	C	D
0	1	2.0	3.0	4

	A	B	C	D
1	5	NaN	NaN	6
2	7	NaN	NaN	8
3	9	10.0	11.0	12

```
55  df2 = pd.read_excel(
        'fillna.xlsx',
        sheet_name=1
    )
    df2
```

55

	A	B	C	D
0	a	b	c	d
1	e	f	g	h
2	i	j	k	l
3	m	n	o	p

```
56  df1.fillna(0)
```

56

	A	B	C	D
0	1	2.0	3.0	4
1	5	0.0	0.0	6
2	7	0.0	0.0	8
3	9	10.0	11.0	12

```
57  df1.fillna({
        'B': 100,
        'C': 200
    })
```

57

	A	B	C	D
0	1	2.0	3.0	4
1	5	100.0	200.0	6
2	7	100.0	200.0	8
3	9	10.0	11.0	12

```
58  df1.fillna(df2)
```

58

	A	B	C	D
0	1	2	3	4

	A	B	C	D
1	5	f	g	6
2	7	j	k	8
3	9	10	11	12

59 `df1.fillna(method='ffill')`

59

	A	B	C	D
0	1	2.0	3.0	4
1	5	2.0	3.0	6
2	7	2.0	3.0	8
3	9	10.0	11.0	12

60 `df1.fillna(method='bfill',`
`          axis=1)`

60

	A	B	C	D
0	1.0	2.0	3.0	4.0
1	5.0	6.0	6.0	6.0
2	7.0	8.0	8.0	8.0
3	9.0	10.0	11.0	12.0