Problem 6

Compute the minimum, 25th percentile, median, 75th, and maximum of ser.

```python
import numpy as np
import pandas as pd
# input
state = np.random.RandomState(100)
ser = pd.Series(state.normal(10, 5, 25))
# output
print(np.percentile(ser, q=[0, 25, 50, 75, 100]))
```

Problem 7

Calculate the frequency counts of each unique value ser.

```python
import pandas as pd
# input
ser = pd.Series(np.take(list('abcdefgh'), np.random.randint(8, size=30)))
# output
print(ser.value_counts())
```

Problem 8

From ser, keep the top 2 most frequent items as it is and replace everything else as 'Other'.

```python
import numpy as np
import pandas as pd
# input
np.random.RandomState(100)
ser = pd.Series(np.random.randint(1, 5, [12]))
print(ser)
print()
output = ser[~ser.isin(ser.value_counts().index[:2])] = 'Other'
print(ser)
```

Problem 10

From ser, extract the items at positions in list pos.

```python
import pandas as pd
# input
ser = pd.Series(list('abcdefghijklmnopqrstuvwxyz'))
pos = [0, 4, 8, 14, 20]

ser.take(pos)
```