Q2:

[66]:
```
import numpy as np

def hello(string):
    i=0
    n = len(string)

    while(i<n):
        rev = string[i]
        la = rev[::-1]

        string[i] = la
        i= i+1

string = np.array(["awwaww","wwe","wwf","whga"])
hello(string)
print(string)
```

```
['wwawwa' 'eww' 'fww' 'aghw']
```

Q1: a

```
import pandas as pd
import numpy as np


california = fetch_california_housing()

ans = pd.DataFrame(california.data)
print(ans)
```

```
            0     1         2         3       4         5      6       7
0      8.3252  41.0  6.984127  1.023810   322.0  2.555556  37.88 -122.23
1      8.3014  21.0  6.238137  0.971880  2401.0  2.109842  37.86 -122.22
2      7.2574  52.0  8.288136  1.073446   496.0  2.802260  37.85 -122.24
3      5.6431  52.0  5.817352  1.073059   558.0  2.547945  37.85 -122.25
4      3.8462  52.0  6.281853  1.081081   565.0  2.181467  37.85 -122.25
...       ...   ...       ...       ...     ...       ...    ...     ...
20635  1.5603  25.0  5.045455  1.133333   845.0  2.560606  39.48 -121.09
20636  2.5568  18.0  6.114035  1.315789   356.0  3.122807  39.49 -121.21
20637  1.7000  17.0  5.205543  1.120092  1007.0  2.325635  39.43 -121.22
20638  1.8672  18.0  5.329513  1.171920   741.0  2.123209  39.43 -121.32
20639  2.3886  16.0  5.254717  1.162264  1387.0  2.616981  39.37 -121.24

[20640 rows x 8 columns]
```

b

```
ans["target"] = california.target
print(ans.head(10))
print("number of features:", ans.shape[1]-1)
```

```
        0     1         2         3       4         5      6       7  target
0  8.3252  41.0  6.984127  1.023810   322.0  2.555556  37.88 -122.23   4.526
1  8.3014  21.0  6.238137  0.971880  2401.0  2.109842  37.86 -122.22   3.585
2  7.2574  52.0  8.288136  1.073446   496.0  2.802260  37.85 -122.24   3.521
3  5.6431  52.0  5.817352  1.073059   558.0  2.547945  37.85 -122.25   3.413
4  3.8462  52.0  6.281853  1.081081   565.0  2.181467  37.85 -122.25   3.422
5  4.0368  52.0  4.761658  1.103627   413.0  2.139896  37.85 -122.25   2.697
6  3.6591  52.0  4.931907  0.951362  1094.0  2.128405  37.84 -122.25   2.992
7  3.1200  52.0  4.797527  1.061824  1157.0  1.788253  37.84 -122.25   2.414
8  2.0804  42.0  4.294118  1.117647  1206.0  2.026891  37.84 -122.26   2.267
9  3.6912  52.0  4.970588  0.990196  1551.0  2.172269  37.84 -122.25   2.611
number of features: 8
```

```
missing = ans.isnull
print(missing)
ans.fillna(ans.mean(),inplace= 'true')
```

c

```
59]: missing = ans.isnull
     print(missing)
     ans.fillna(ans.mean(),inplace= 'true')
```

```
<bound method DataFrame.isnull of            0     1         2         3       4         5      6       7  \
0       8.3252  41.0  6.984127  1.023810   322.0  2.555556  37.88 -122.23
1       8.3014  21.0  6.238137  0.971880  2401.0  2.109842  37.86 -122.22
2       7.2574  52.0  8.288136  1.073446   496.0  2.802260  37.85 -122.24
3       5.6431  52.0  5.817352  1.073059   558.0  2.547945  37.85 -122.25
4       3.8462  52.0  6.281853  1.081081   565.0  2.181467  37.85 -122.25
...        ...   ...       ...       ...     ...       ...    ...     ...
20635   1.5603  25.0  5.045455  1.133333   845.0  2.560606  39.48 -121.09
20636   2.5568  18.0  6.114035  1.315789   356.0  3.122807  39.49 -121.21
20637   1.7000  17.0  5.205543  1.120092  1007.0  2.325635  39.43 -121.22
20638   1.8672  18.0  5.329513  1.171920   741.0  2.123209  39.43 -121.32
20639   2.3886  16.0  5.254717  1.162264  1387.0  2.616981  39.37 -121.24

       target
0       4.526
1       3.585
2       3.521
3       3.413
4       3.422
...       ...
20635   0.781
20636   0.771
```