```python
l = ['raja','prasanth','sandeep','naveen']
```

str → (points to the opening bracket region)

list → (points to the list)

$$S = \text{'raja'}$$

positions: 0 1 2 3

$$S[1] = \text{'A'}$$

```python
S1 = ''
for i in S:
    if i in 'aeiouAEIOU':
        S1 = S1 + i.upper()
    else:
        S1 = S1 + i
else:
    print(S1)   =>   rAjA
```

```python
l = [1, 2, 3, 4, 5]
       0  1  2  3  4
l.insert(3, 100)
```

```
l = [8,3,1,2,1]
for i in l:
    l.remove(i)
else:
    print(l)

[3, 2]
```

iteration: 1
index: 0
i = 8

$$\overset{0\ \ 1\ \ 2\ \ 3\ \ 4}{[\cancel{8}, 3, 1, 2, 1]}$$

iteration: 2
index: 1
i = 1

$$\overset{0\ \ 1\ \ 2\ \ 3}{[3, \cancel{1}, 2, 1]}$$

itration: 3
index: 2
i = 1

$$\overset{0\ \ 1\ \ 2}{[3, 2, \cancel{1}]}$$

iteration: 4
index: 3

$$\overset{0\ \ 1}{[3, 2]}$$

$l = [\ 8,\ 4,\ 3,\ 5]$ ← input

$l = [\ [0,1,2,3,4,5,6,7],$
$[0,1,2,3],$
$[0,1,2],$
$[0,1,2,3,4]$
$]$ ← output