```
In [1]: list1=['a',22,14,'string',55]
        list2=['b',56,24,'before',True]
        print(list1)
```

```
['a', 22, 14, 'string', 55]
```

```
In [3]: list1.append(7)
        print(list1)
```

```
['a', 22, 14, 'string', 55, 7]
```

```
In [4]: print(len(list1))
```

```
6
```

```
In [5]: print(len(list1[3]))
```

```
6
```

```
In [6]: a=list1
        print(a)
```

```
['a', 22, 14, 'string', 55, 7]
```

```
In [7]: b=list1+list2
        print(b)
```

```
['a', 22, 14, 'string', 55, 7, 'b', 56, 24, 'before', True]
```

```
In [8]: for i in b :
            print(i)
```

```
a
22
14
string
55
7
b
56
24
before
True
```

```
In [9]: print(b[4])
```

```
55
```

```
In [10]: b.insert(1,'always')
         print(b)
```

```
['a', 'always', 22, 14, 'string', 55, 7, 'b', 56, 24, 'before', True]
```

```
In [ ]:
```

```
In [11]: for i in range(8):
             print(i)
```

```
0
1
2
3
4
5
6
7
```

In [12]:
```python
for i in b:
    print(i,len(i))
```

```
a 1
always 6
```
```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_7112\2118073885.py in <module>
      1 for i in b:
----> 2     print(i,len(i))

TypeError: object of type 'int' has no len()
```

In [13]:
```python
for i in range(1,6):
    print(i*i)
```

```
1
4
9
16
25
```

In [14]:
```python
i=0
while i<len(b):
    print(b[i])
    i=i+1
```

```
a
always
22
14
string
55
7
b
56
24
before
True
```

In [10]:
```python
list1=['a',22,14,'string',55]
list2=['b',56,24,'before',True]
b=list1+list2
print(b)
```

```
['a', 22, 14, 'string', 55, 'b', 56, 24, 'before', True]
```

In [11]:
```python
b.append('helo')
print(b)
```

```
['a', 22, 14, 'string', 55, 'b', 56, 24, 'before', True, 'helo']
```

In [12]:
```python
b.sort()
print(b)
```

```
-------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_3992\3572143030.py in <module>
----> 1 b.sort()
      2 print(b)

TypeError: '<' not supported between instances of 'int' and 'str'
```

In [13]:
```python
c=['helo','hi','always','string']
c.sort()
print(c)
```

```
['always', 'helo', 'hi', 'string']
```

In [14]:
```python
b.reverse()
print(b)
```

```
['helo', True, 'before', 24, 56, 'b', 55, 'string', 14, 22, 'a']
```

In [15]:
```python
b.remove('before')
print(b)
```

```
['helo', True, 24, 56, 'b', 55, 'string', 14, 22, 'a']
```

In [16]:
```python
b.pop()
print(b)
```

```
['helo', True, 24, 56, 'b', 55, 'string', 14, 22]
```

In [17]:
```python
b.pop(1)
print(b)
```

```
['helo', 24, 56, 'b', 55, 'string', 14, 22]
```

In [18]:
```python
print(list1)
print(list2)
```

```
['a', 22, 14, 'string', 55]
['b', 56, 24, 'before', True]
```

In [19]:
```python
list1.extend(list2)
print(list1)
print(list2)
```

```
['a', 22, 14, 'string', 55, 'b', 56, 24, 'before', True]
['b', 56, 24, 'before', True]
```

In [ ]: