

Write a python program to convert ['1','2','4',['5','9','3'],'7','0'] to ['1','2','4','5','9','3','7','0'].

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### ✓ Example Input

```
data = ['1', '2', '4', ['5', '9', '3'], '7', '0']
```

### ✓ Expected Output

```
['1', '2', '4', '5', '9', '3', '7', '0']
```

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## 1 Using a simple loop (recommended for beginners)

```
data = ['1', '2', '4', ['5', '9', '3'], '7', '0']
```

```
flattened = []
```

```
for item in data:
```

```
    if isinstance(item, list): # check if element is a list
```

```
        flattened.extend(item)
```

```
    else:
```

```
        flattened.append(item)
```

```
print(flattened)
```

### ✓ Output:

```
['1', '2', '4', '5', '9', '3', '7', '0']
```

## 2 Solution — using only for loops

```
data = ['1', '2', '4', ['5', '9', '3'], '7', '0']
```

```
flattened = []
```

```
for i in data:
```

```
    # check if it's a list by comparing type directly
```



```
if type(i) == list:
    for j in i:    # loop through inner list
        flattened += [j] # append manually
else:
    flattened += [i]

print(flattened)
```

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### ✓ Output

```
['1', '2', '4', '5', '9', '3', '7', '0']
```

