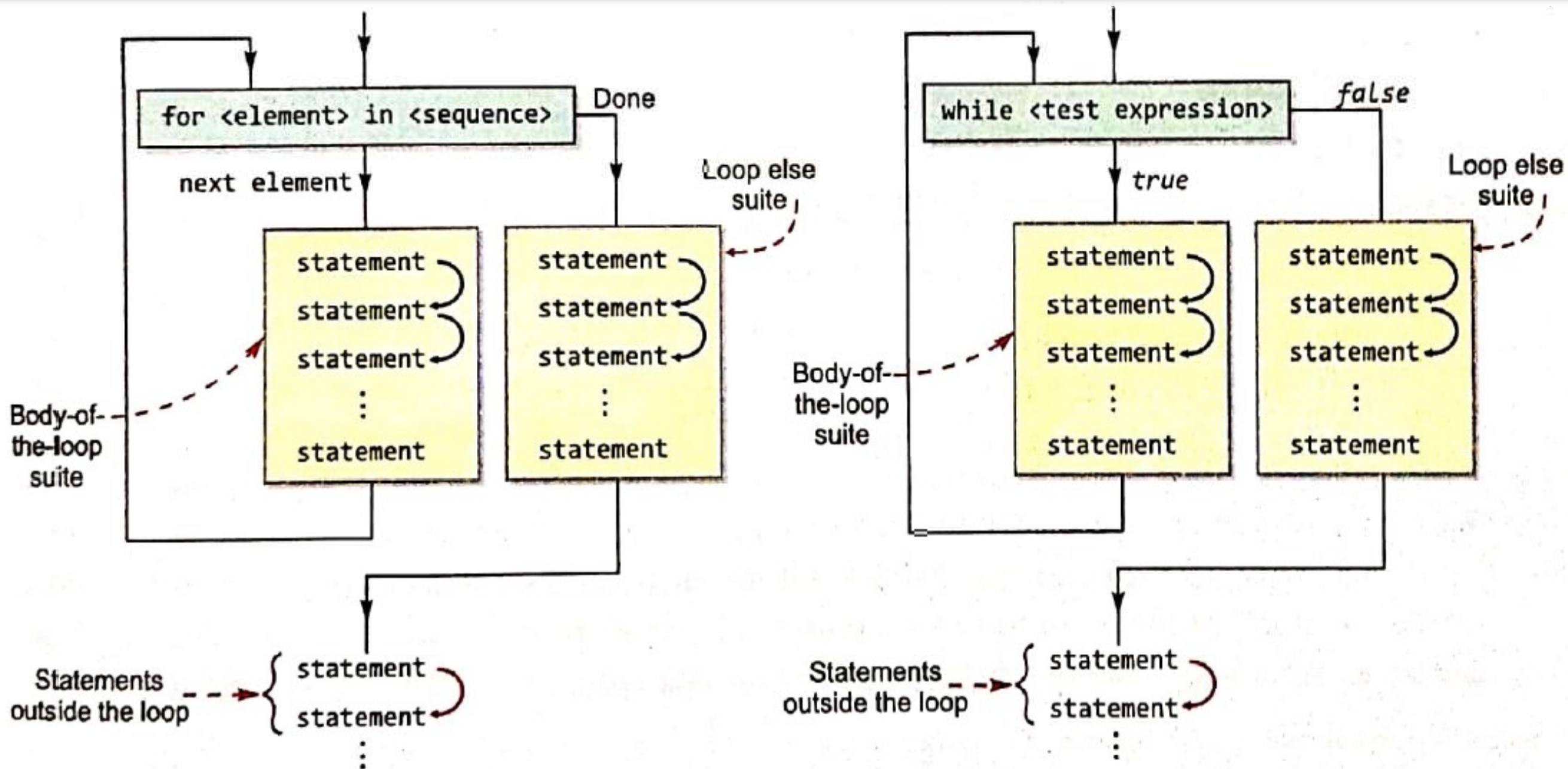


More On Loops

- ❖ *There are two more things you need to know about loops the loop else clause and nested loops.*
- ❖ ***Loop else statement***
- ❖ *Python loops have an optional health clause. Complete syntax text of python loops along with else clause is as given below:*

More On Loops



039 LOOP WITH IF ELSE

```
for a in range (1, 8):  
    if a%6==0:  
        break  
    print("Element is", end=' ')  
    print(a)  
else:  
    print("Ending loop after printing all elements of sequence")
```

More On Loops

If, in above code, you change the line

```
if a % 8 == 0 :
```

with

```
if a % 2 == 0 :
```

Then the output will be :

Element is 1

Notice that for $a = 2$, the break got executed and loop terminated. Hence just one element got printed (for $a = 1$). As break terminated the loop, the else clause also did not execute, so no line after the printing of elements.

More On Loops

❖ *Nested loops*

- ❖ *A loop contain another loop in its body this form of a loop is called nested look but in nested loop the inner loop must terminate before the outer loop*

NOTE : The else clause of a Python loop executes when the loop terminates normally, not when the loop is terminating because of the break statement

040 NESTED LOOP

```
for i in range (1, 6):  
    for j in range (1, i):  
        print('*', end=' ' )  
    print()
```

PYTHON TEST – 1.13

MORE ON LOOPS

