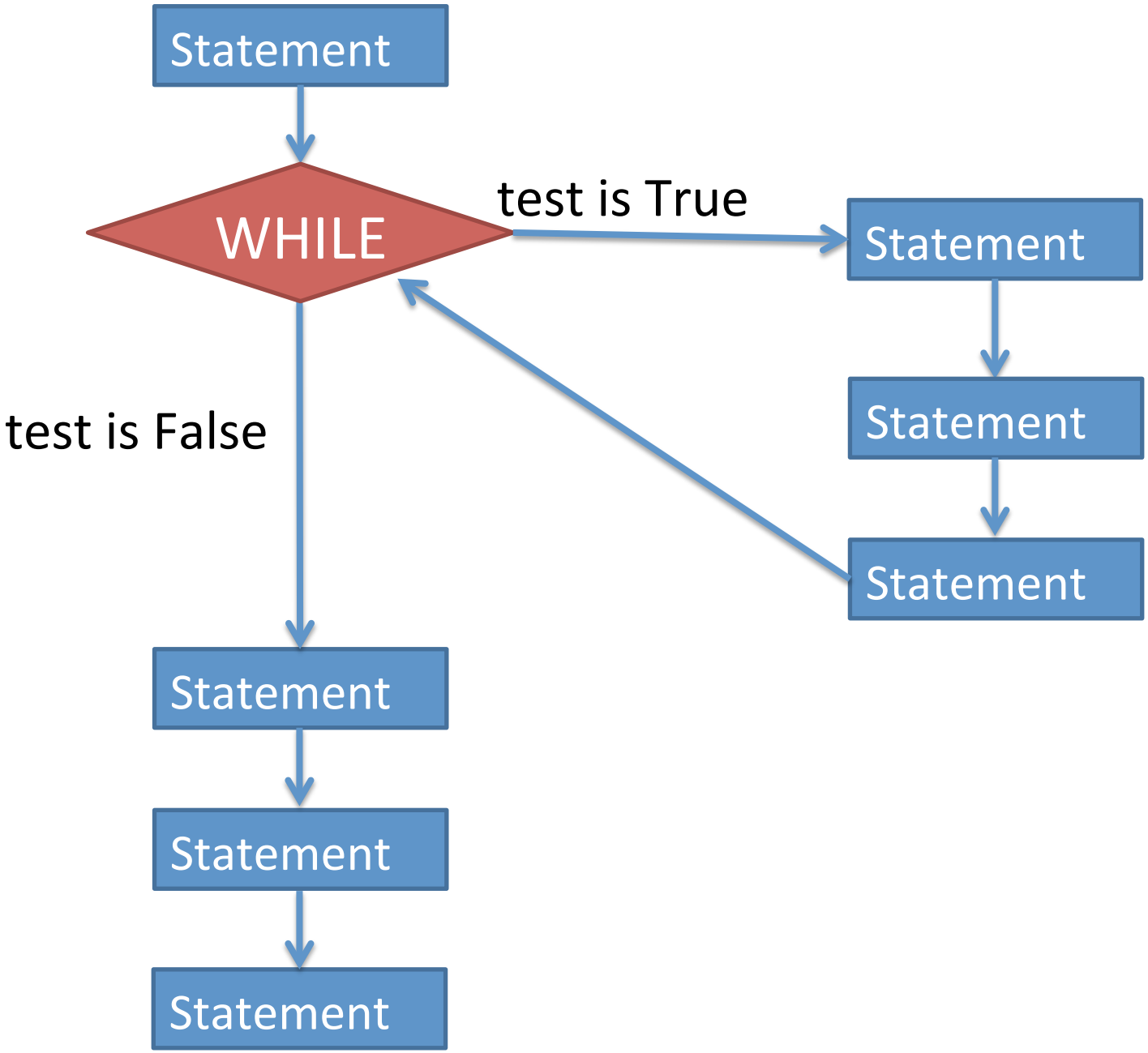
```
while   test   :
   statement
   statement
   more statements…
statement
statement
more statements…
```

The *test* must be something that is True or False.

The indented statements are called the body of the loop.


Statement
WHILE
test is True
Statement
Statement
Statement
test is False
Statement
Statement
Statement

- Pseudocode is an informal way of writing algorithms for humans to read (not computers!)
- Illustrates the logic of an algorithm, but omits details that people can fill in automatically.
- You get to make it up as you go along, as long as you (and other people) can easily understand it.

- Instead of saying

  name = input("What is your name?")
- Pseudocode might use a line that says

  ask user for name

- Instead of saying

  if x >= 0 and x <= 100
- Pseudocode might use a line that says

  if x is between 0 and 100

The point is to get your ideas down on paper quickly, so you can worry about programming details and exact syntax later.

To write any while loop:

1. Write out pseudocode for what the loop does, explicitly repeating lines until you've repeated the code at least twice.
2. Include an "if" statement in your code that will be True if you want the loop to keep going.
3. Make sure the code repeats the "if" statement at least twice.

To write any while loop:

4. Find the statements between consecutive "if" statements. These statements will become the body of the loop.
5. The "if" test will become the "while" test.
6. If there's anything before the first "if" test, it will go immediately before the while loop (outside of the body).
7. After the end of the loop, but what you want to happen after the while test changes from True to False.