

Python If Statement

Python if, else

Statements



```
    else;  
    .hasOwnProperty("unread_notifs")  
    if (global.data.unread_notifs) {  
        global.data.unread_notifs =  
        var a = $("mmi-notif .hri  
        a.html(t.unread_notifs), t  
            "unread-icon")  
    } else;
```

Conditional Statements in Python

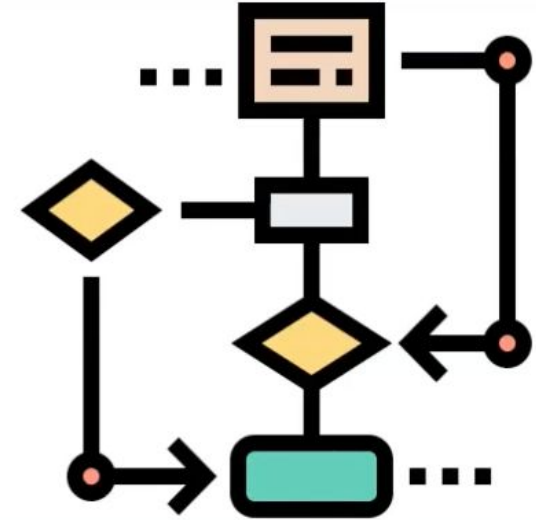
If statement

If else statement

Elif statement

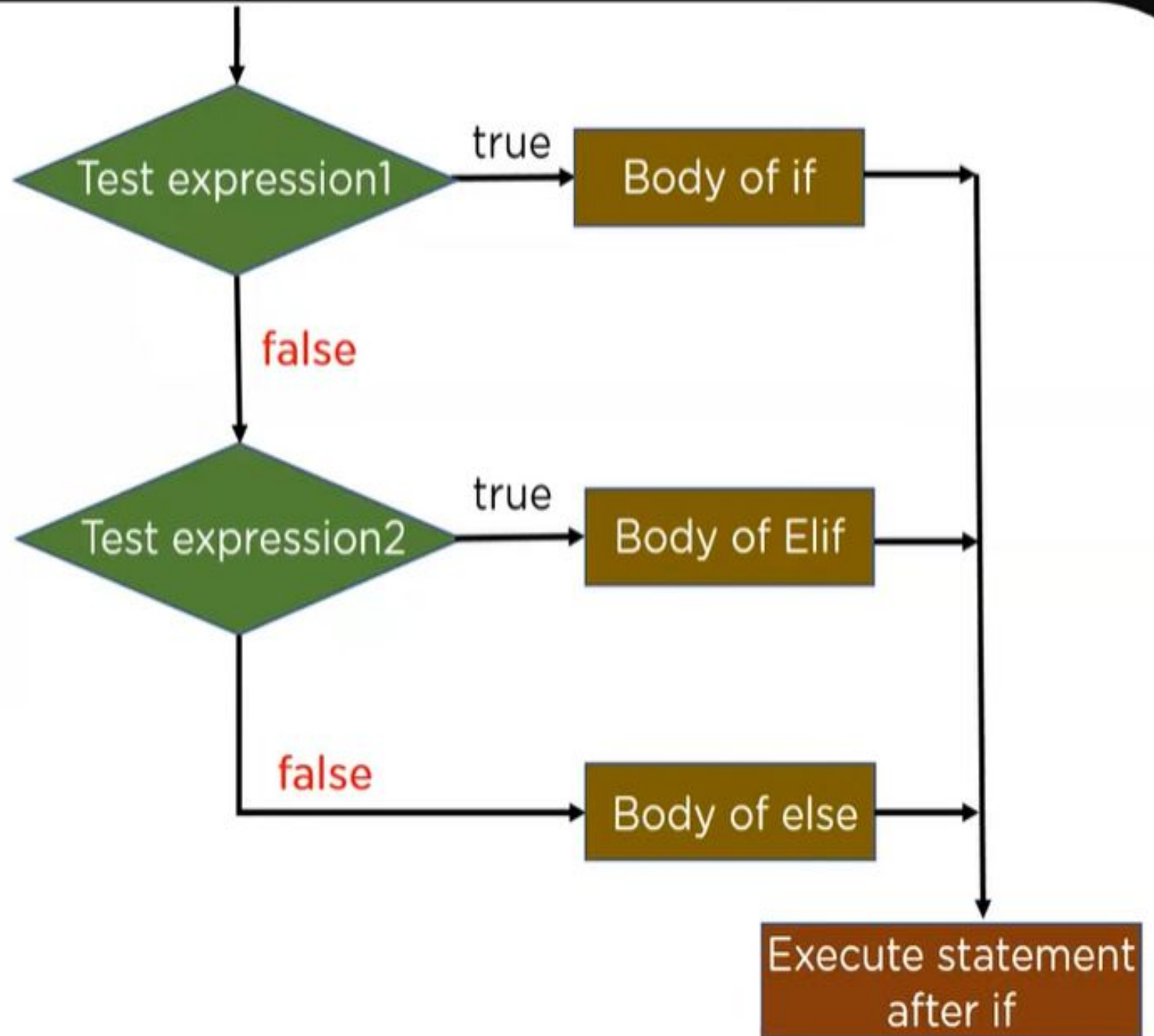
Nested If statement

Nested If Else statement



Syntax:

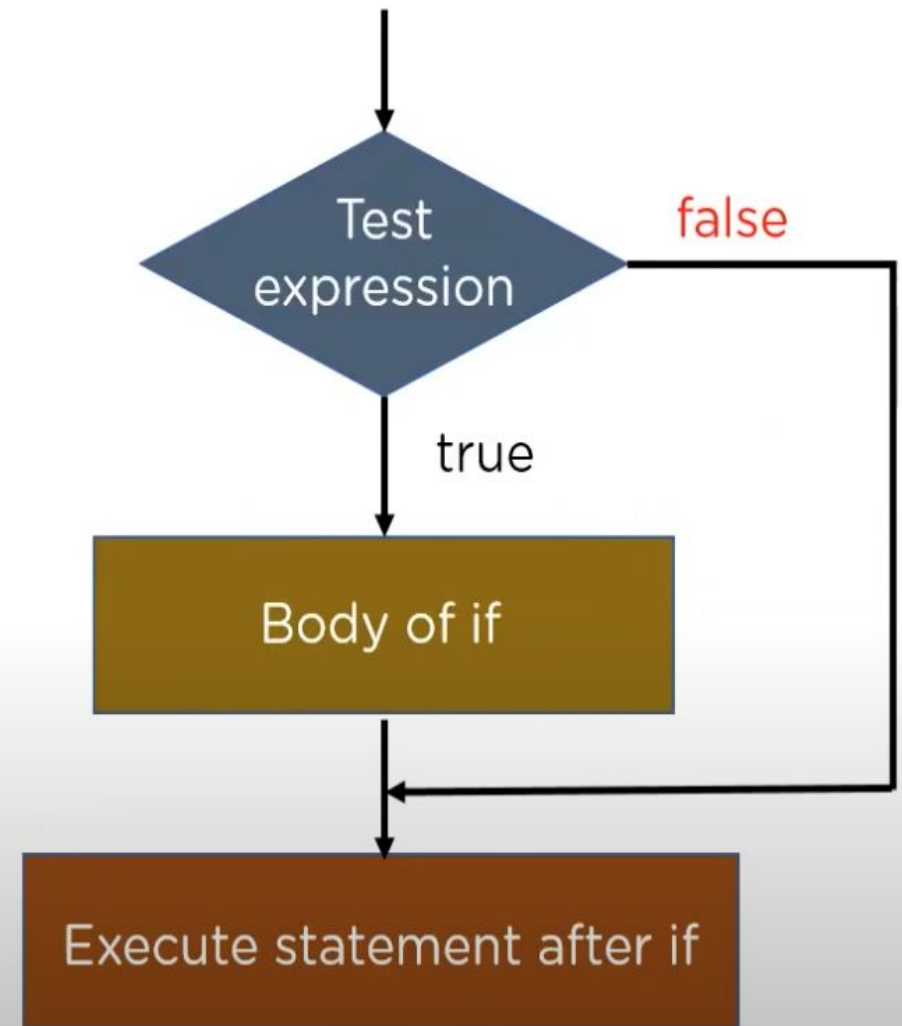
```
if(condition):  
{  
    # if statement  
}  
elif(condition):  
{  
    # elif statement  
}  
else:  
{  
    # else statement  
}
```



If Statement

Syntax:

```
if(condition)
{
    #if statement
}
```



```
In [1]: ▶ # If stmt

grade = 80
if grade >= 50:
    print("Passed in the exam")

Passed in the exam
```

```
In [2]: ▶ # If stmt

grade = 30
if grade >= 50:
    print("Passed in the exam")
```

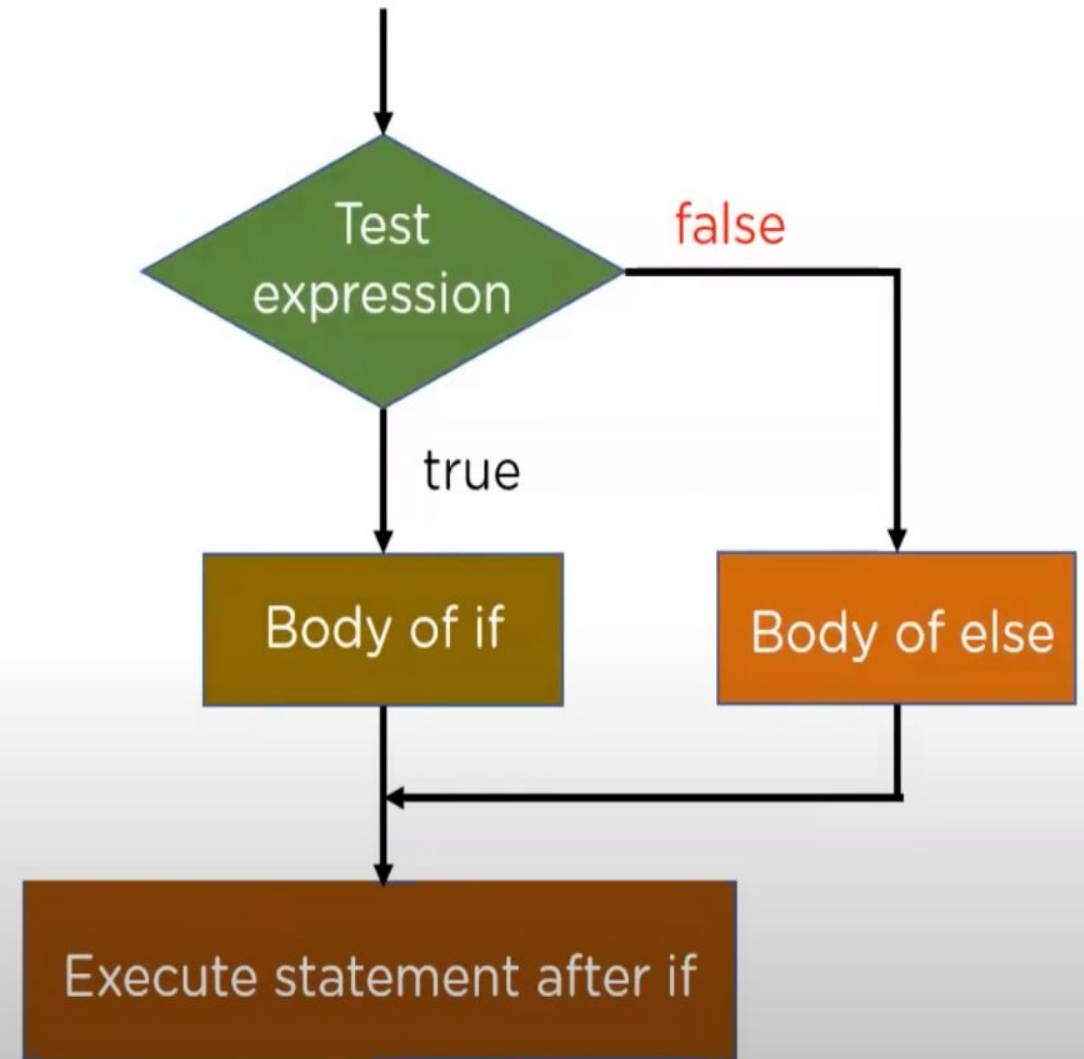
```
In [2]: ▶ # If stmt

grade = 30
if grade >= 50:
    print("Passed in the exam")
```

If Else Statement

Syntax:

```
if(condition):  
{  
    # if statement  
}  
else:  
{  
    # else statement  
}
```



```
In [10]: ► grade = 40
          if grade >= 50:
              print("Pass")
          if grade < 50:
              print("Fail")
```

Fail

```
In [11]: ► #if-else
          grade = 40
          if grade >= 50:
              print("Pass")
          else:
              print("Fail")
```

Fail

```
In [12]: ► #if-else
          grade = int(input("Enter the grade "))
          if grade >= 50:
              print("Pass")
          else:
              print("Fail")
```

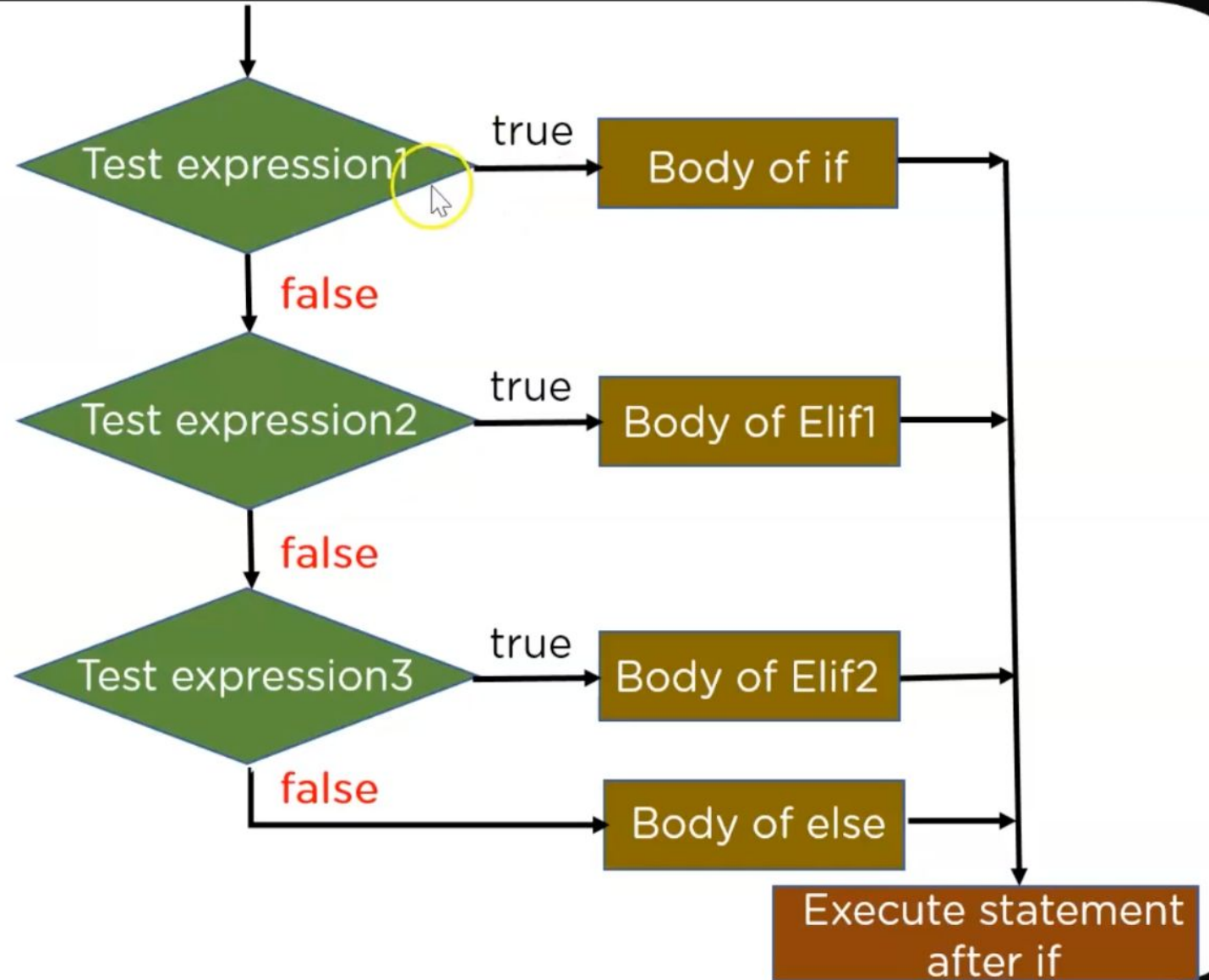
Enter the grade 80
Pass



Elif Statement

Syntax:

```
if(condition):  
{  
    # if statement  
}  
elif(condition):  
{  
    # elif statement  
}  
else:  
{  
    # else statement  
}
```



In [14]: ▶ *#Elif stmt*

```
score = int(input("Enter the score "))
if score >= 90:
    print("Passed the exam with A grade")
elif score >= 75:
    print("Passed the exam with B grade")
elif score >= 60:
    print("Passed the exam with C grade")
elif socre >= 40:
    print("Passed the exam with D grade")
else:
    print("Failed in the exam")
```

Enter the score 95

Passed the exam with A grade

In [18]:



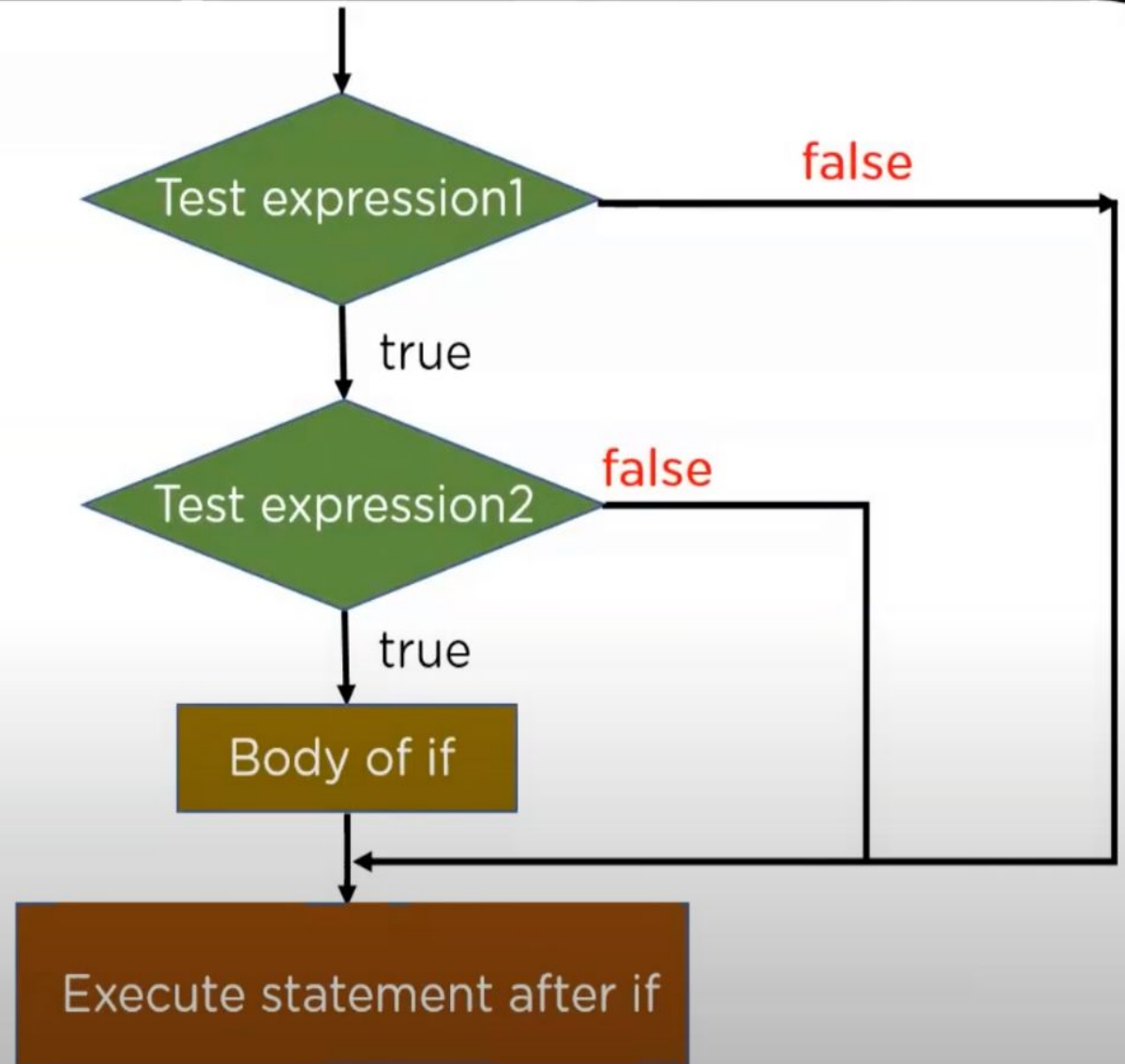
```
for x in range(10):  
    if x <= 3:  
        print(x, "is less than or equal to three")  
    elif x > 5:  
        print(x, "is greater than five")  
    else:  
        print(x, "must be four or five")
```

```
0 is less than or equal to three  
1 is less than or equal to three  
2 is less than or equal to three  
3 is less than or equal to three  
4 must be four or five  
5 must be four or five  
6 is greater than five  
7 is greater than five  
8 is greater than five  
9 is greater than five
```

Nested If Statement

Syntax:

```
if(condition):  
{  
    if(condition):  
    {  
        # if statement  
    }  
}
```




```
In [22]: ▶ # Nested if
num = int(input("Enter the number "))
if(num < 250):
    print(num, "is smaller than 250")
if(num < 180):
    print(num, "is smaller thna 180 as well")
else:
    print(num, "is greater than 180")
```

Enter the number 100

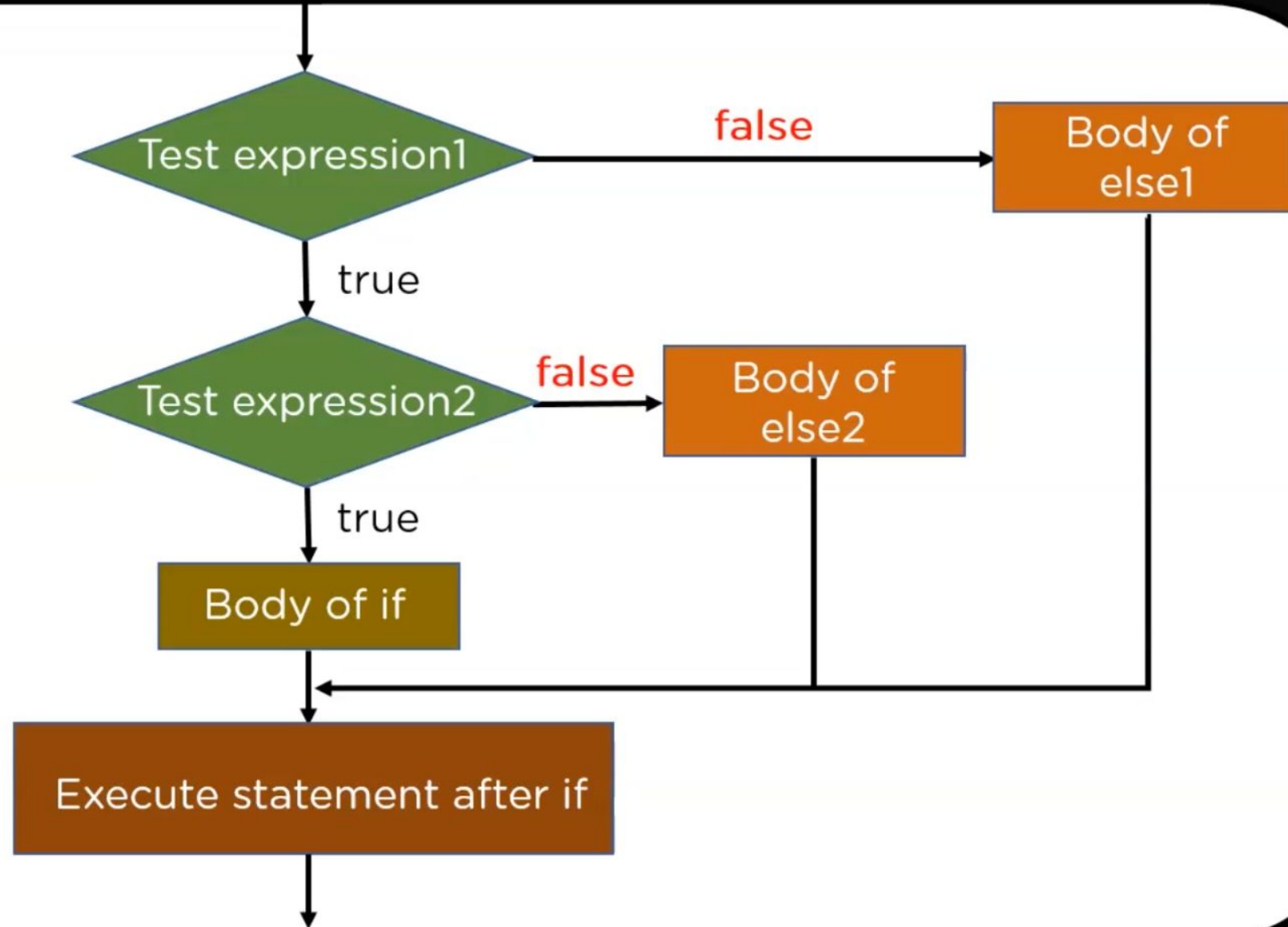
100 is smaller than 250

100 is smaller thna 180 as well

Nested If Else Statement

Syntax:

```
if(condition):  
{  
    if(condition):  
    {  
        #if statement  
    }  
    else:  
    {  
        #else statement  
    }  
}  
else:  
{  
    #else statement  
}
```



In [25]:



```
# nested if else
a = int(input("Enter the number "))
if a<50:
    if a%3 == 0:
        print(a, "is divisible by 3 and is less than 50")
    else:
        print(a, "is not divisible by 3 but is less than 50")
else:
    print(a, "is greater than 50")
```

Enter the number 12

12 is divisible by 3 and is less than 50

In [27]:



```
# nested if else
a = int(input("Enter the number "))
if a<50:
    if a%3 == 0:
        print(a, "is divisible by 3 and is less than 50")
    else:
        print(a, "is not divisible by 3 but is less than 50")
else:
    print(a, "is greater than 50")
```

Enter the number 72

72 is greater than 50

1. Basic `if` Statement:

```
x = 10

if x > 5:
    print("x is greater than 5")
```

x is greater than 5

3. `if-elif-else` Statement:

```
grade = 75

if grade >= 90:
    print("A")
elif grade >= 80:
    print("B")
elif grade >= 70:
    print("C")
else:
    print("F")
```

C

2. `if-else` Statement:

```
y = 3

if y % 2 == 0:
    print("y is even")
else:
    print("y is odd")
```

y is odd

4. Nested `if` Statements:

```
temperature = 25

if temperature > 0:
    print("Above freezing")
    if temperature > 20:
        print("Warm")
    else:
        print("Cool")
else:
    print("Below freezing")
```

Above freezing
Warm

5. Short `if` Statement:

```
a = 5
b = 10

max_value = a if a > b else b
print("Maximum value:", max_value)
```

Maximum value: 10

6. Multiple Conditions:

```
num = 7

if num > 0 and num % 2 == 0:
    print("Positive and even")
elif num > 0 and num % 2 != 0:
    print("Positive and odd")
else:
    print("Non-positive")
```

Positive and odd

7. Checking for Membership:

```
fruits = ['apple', 'banana', 'orange']
fruit_to_check = 'banana'

if fruit_to_check in fruits:
    print(f"{fruit_to_check} is in the list")
else:
    print(f"{fruit_to_check} is not in the list")
```

banana is in the list

