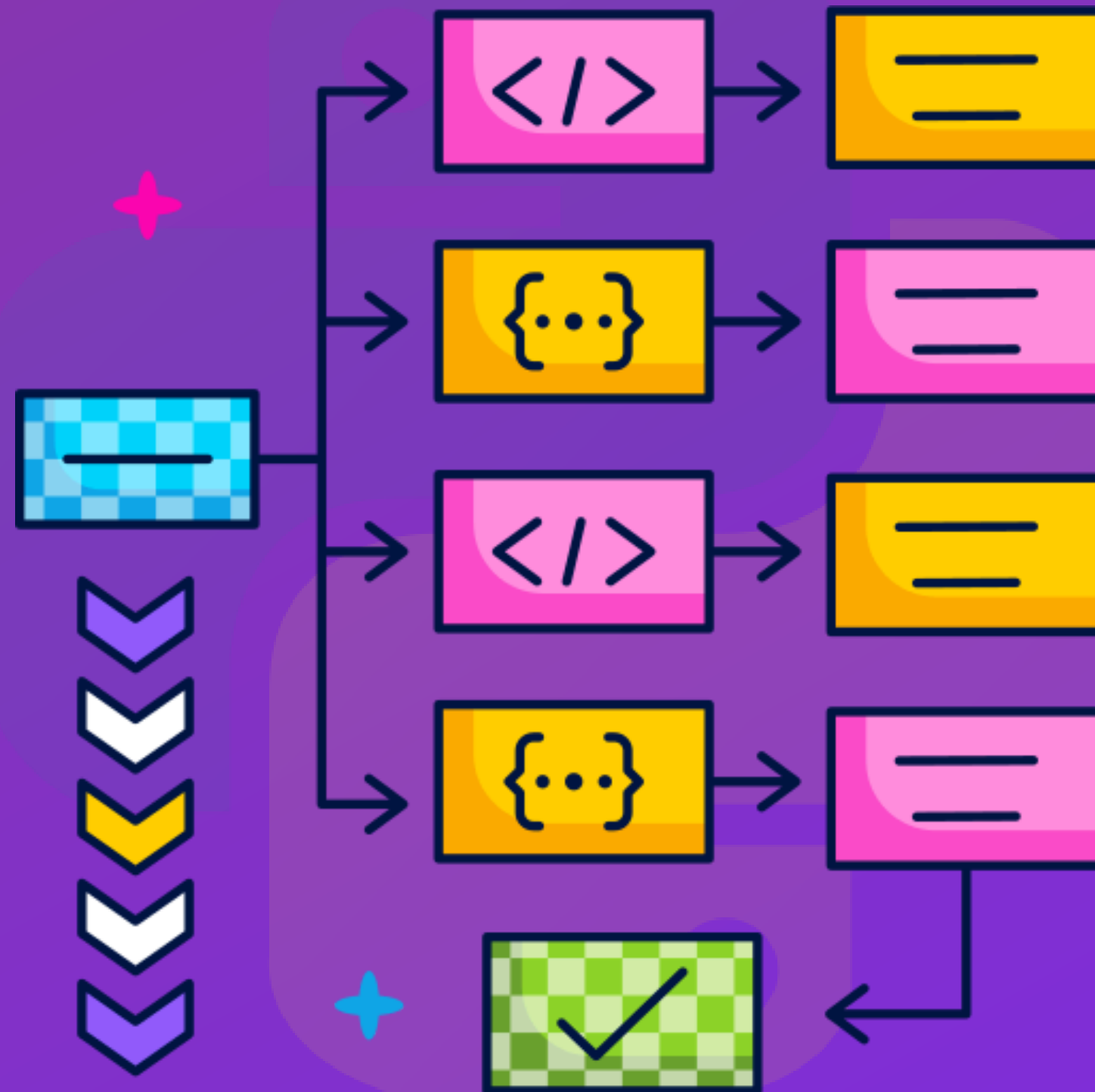


# PROGRAM FLOW CONTROL

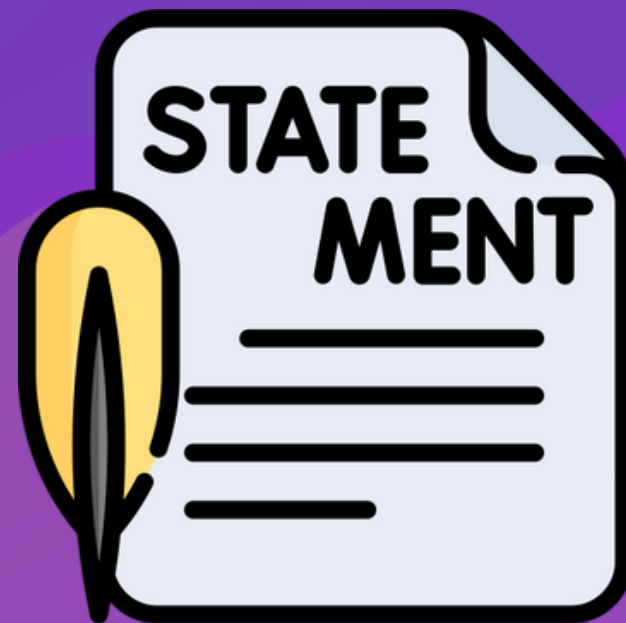


# PROGRAM FLOW CONTROL

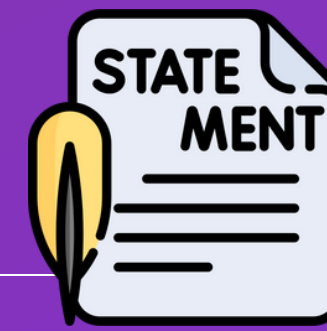
```
if some_condition_is_true:  
    # 1. execute_this_code  
elif some_other_condition_is_true:  
    # 2. execute_this_code  
else:  
    # 3. execute_this_code
```



# STATEMENTS VS. EXPRESSIONS

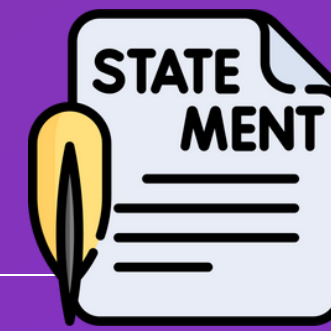


# STATEMENTS VS. EXPRESSIONS



- **Statements** perform actions and control the flow or structure of the program. They don't directly produce a value. Example: `x = 5`

# STATEMENTS VS. EXPRESSIONS



- **Statements** perform actions and control the flow or structure of the program. They don't directly produce a value. Example: `x = 5`
- **Expressions** always evaluate to a value. They can appear inside statements. Example: `len('Hello')`

# BOOLEAN VARIABLES AND EXPRESSIONS

- A boolean variable is an object of the `bool` class which is an `int` subclass.

Boolean constants:

- 1 `True`
- 2 `False`

# LOGICAL (BOOLEAN) OPERATORS: AND, OR, NOT



# LOGICAL (BOOLEAN) OPERATORS

---

- A boolean expression is a logical statement that is either **True** or **False**.





# LOGICAL (BOOLEAN) OPERATORS

---

- A boolean expression is a logical statement that is either True or False.

Logical (Boolean) operators:

- 1 and
- 2 or
- 3 not

# THE LOGICAL “and” OPERATOR

---

- The “and” operator returns True only if both conditions are True.
- If any condition is False, the entire expression is False.

# THE LOGICAL “or” OPERATOR

---

- With the “or” operator, only one of the conditions needs to be True for the whole expression to evaluate as True.
- If all conditions are False, the result is False.

# THE BREAK STATEMENT



# THE BREAK STATEMENT

---

- The **break** statement breaks out of the innermost enclosing **for** or **while** loop.



# THE BREAK STATEMENT

---

- The **break** statement breaks out of the innermost enclosing **for** or **while** loop.
- If the **break** statement is inside a nested loop, **break** will terminate only the innermost loop.

