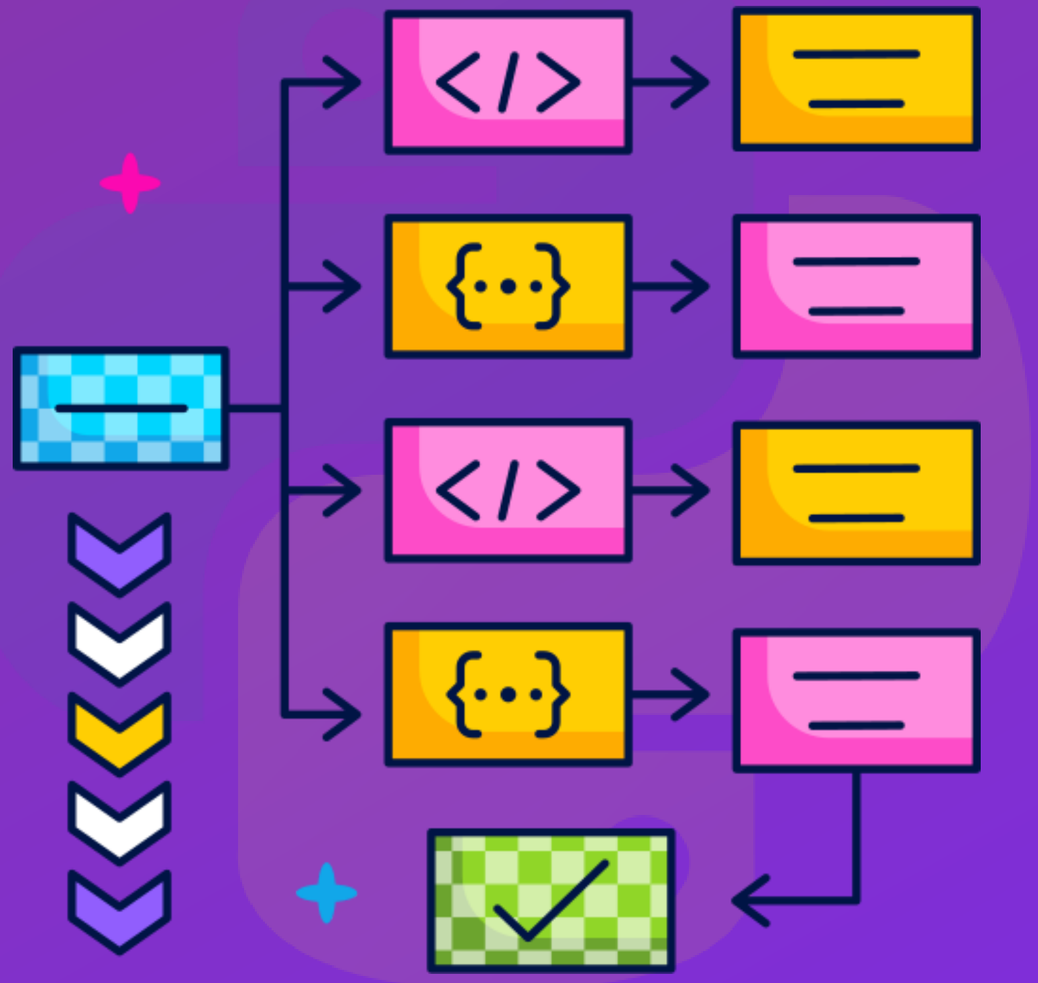
PROGRAM FLOW CONTROL



PROGRAM FLOW CONTROL

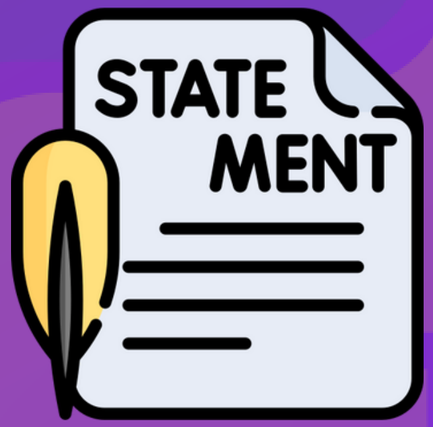
- Indentation and code blocks.
- Conditinal statements.
- if..else..elif
- Boolean variables and truthy values.
- Logical operators
- and a lot more ...

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
fi
```

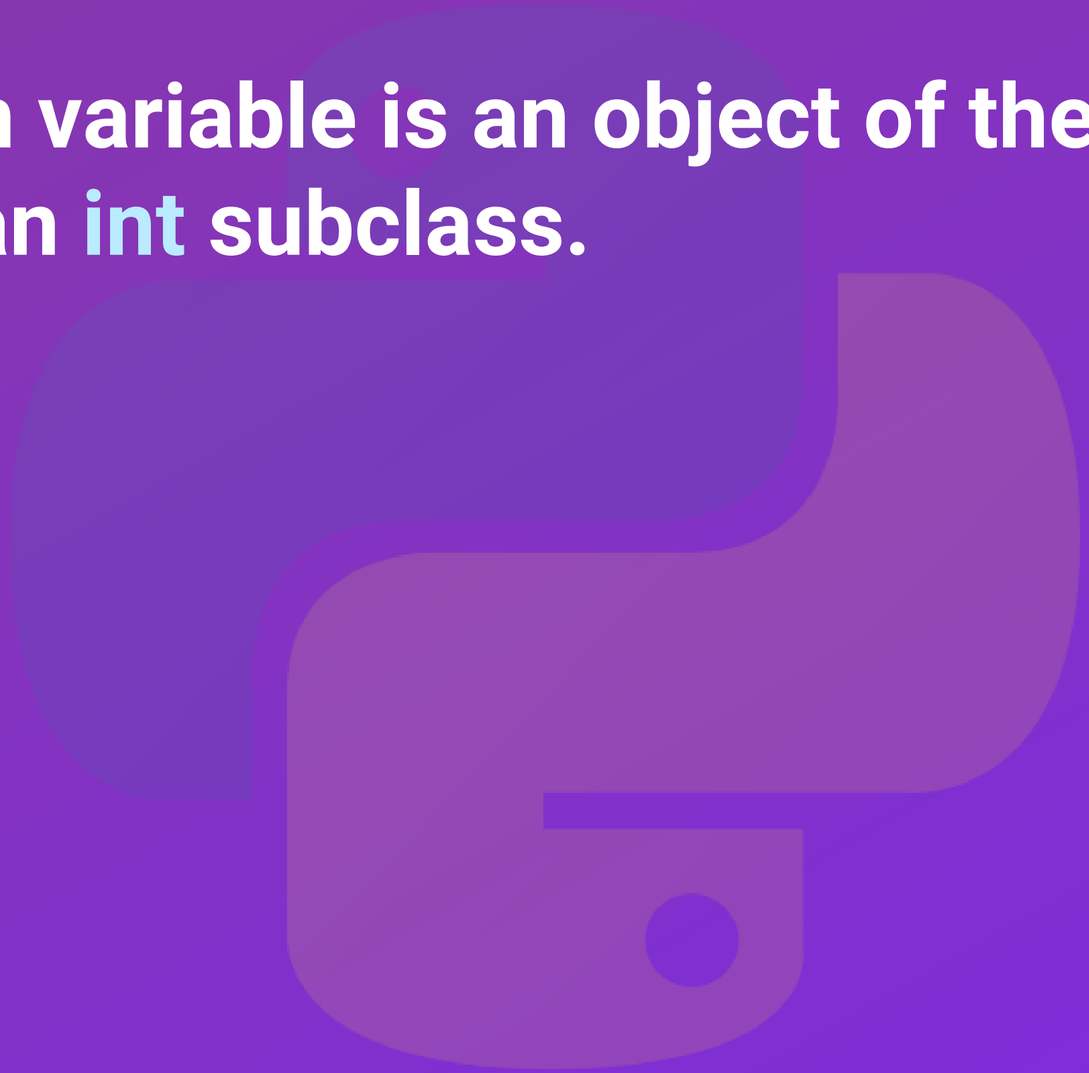
STATEMENTS VS. EXPRESSIONS

A statement is a unit of code and an expression is a special statement that can be evaluated to some value.



BOOLEAN VARIABLES AND EXPRESSIONS

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



BOOLEAN VARIABLES AND EXPRESSIONS

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Boolean constants:

1. True
2. False

THE TRUTHY VALUE

Truthiness of objects

Variable Type	**bool(variable)**
int	bool(0) is False, bool(x) is True if x != 0
float	bool(0.0) is False, bool(x) is True if x != 0.0
sequences (strings, lists, tuples)	False if str is empty, True otherwise
dictionary, set	False if dict/set are empty, True otherwise
custom classes	They implement the __bool__ and/or __len__ methods

LOGICAL (BOOLEAN) OPERATORS

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

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

Logical (Boolean) operators:

1. and
2. or
3. not

THE LOGICAL OR OPERATOR

- At least one of the expressions must be True for the compound expression to be considered True.
- If all subexpressions are False, then the entire compound expression is False.

THE BREAK STATEMENT

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

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- If the break statement is inside a nested loop, break will terminate only the innermost loop.