

# Python Programming

Session - 2

- Ajay Kumar

# String Formatting

```
# printf-style % string formatting
S = '%s is %d years old.' % ('Bob', 25)
print(S)
# Prints Bob is 25 years old.
```

```
# format() Built-in Method
S = '{1} is {0} years old.'.format(25, 'Bob')
print(S)
# Prints Bob is 25 years old.
```

```
# f-String Formatter
name = 'Bob'
age = 25
S = f"{name} is {age} years old."
print(S)
# Prints Bob is 25 years old.
```

# Basic String Operations

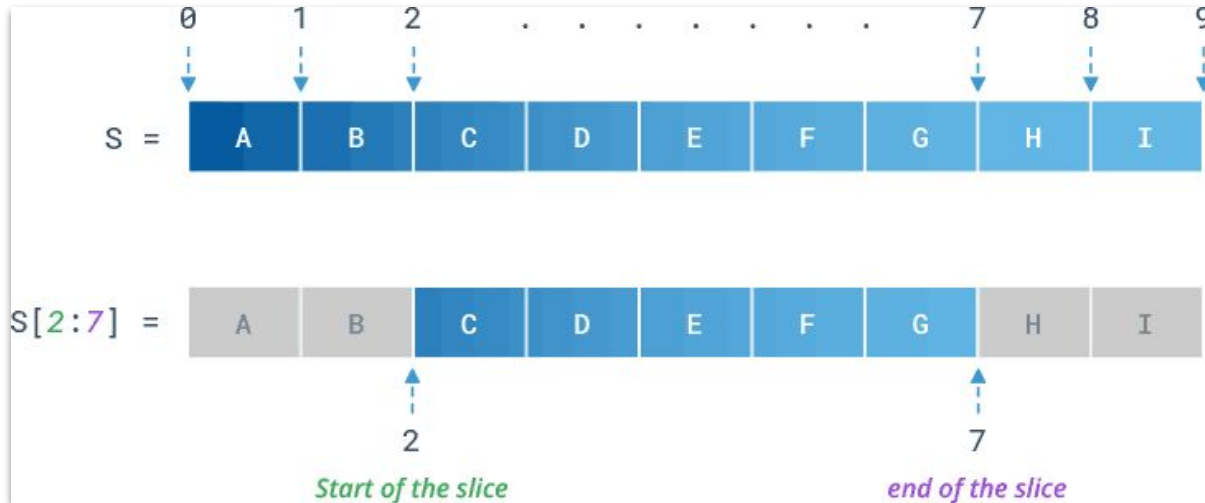
- Length, Index, Count
- Other basic string functions - upper, lower, switchcase, capitalize, startswith, endswith, split

0	1	2	3	4	5	6	7	8
A	B	C	D	E	F	G	H	I
-9	-8	-7	-6	-5	-4	-3	-2	-1

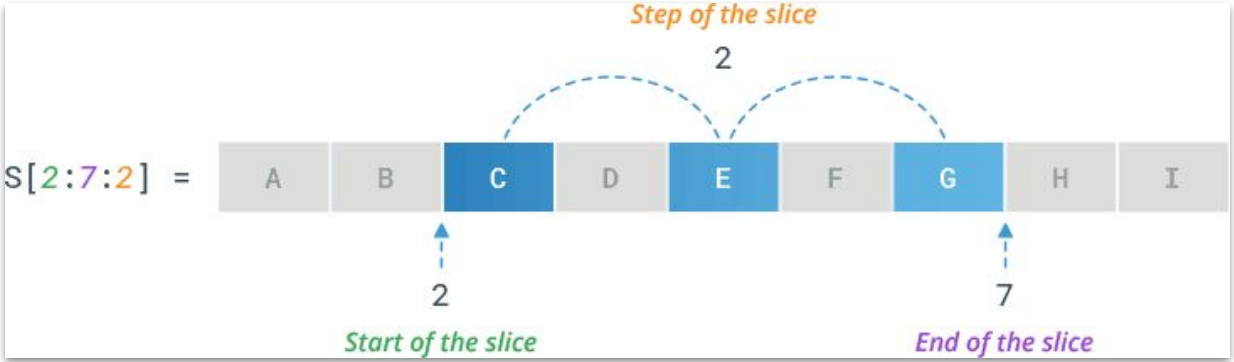
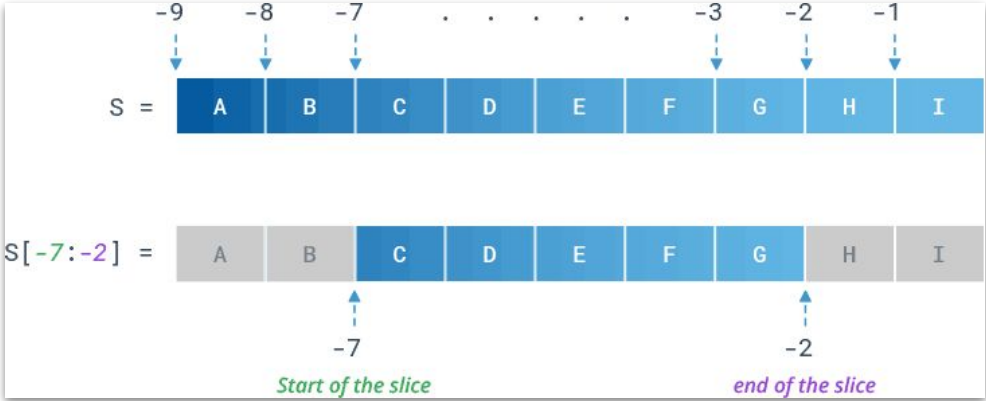
# Basic String Operations - String Slicing

`S[start:stop:step]`

*Start position    End position    The increment*



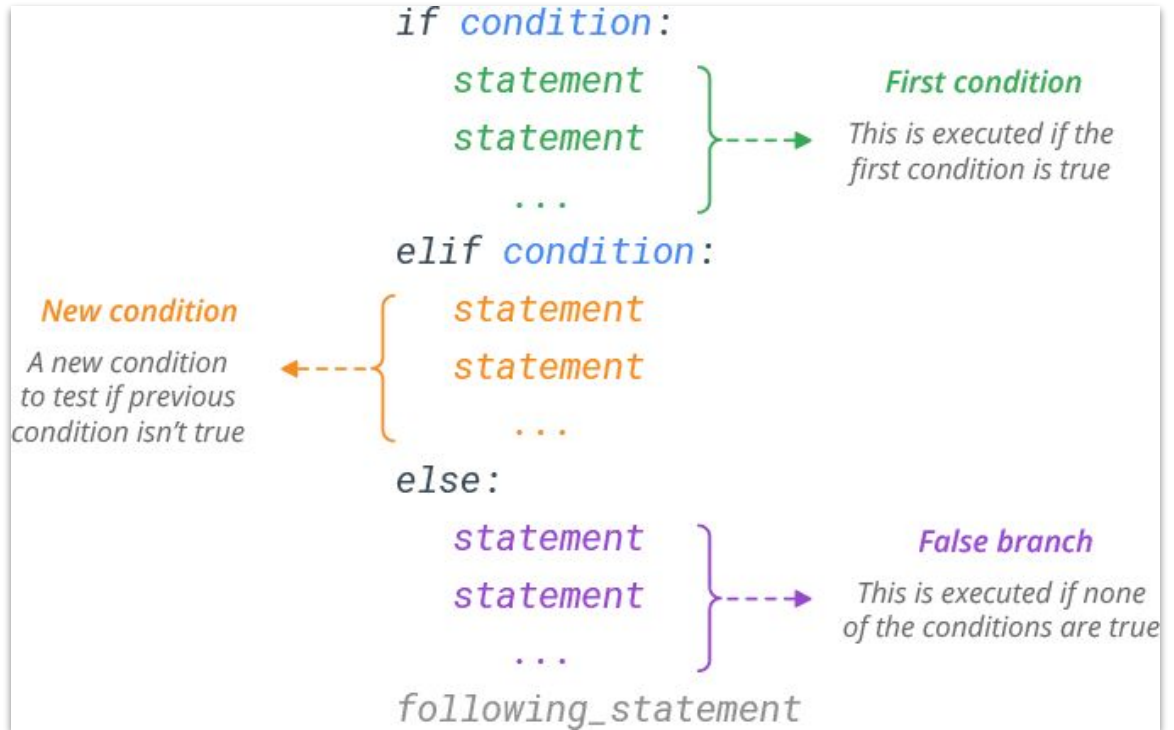
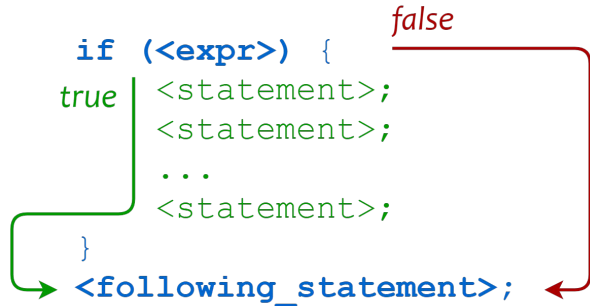
# Basic String Operations - String Slicing



# Conditions

- Python supports the usual logical conditions from mathematics:
  - Equals:  $a == b$
  - Not Equals:  $a != b$
  - Less than:  $a < b$
  - Less than or equal to:  $a \leq b$
  - Greater than:  $a > b$
  - Greater than or equal to:  $a \geq b$
- Boolean Operators - And, Or, in, is, not

# Conditions - if, elif, else



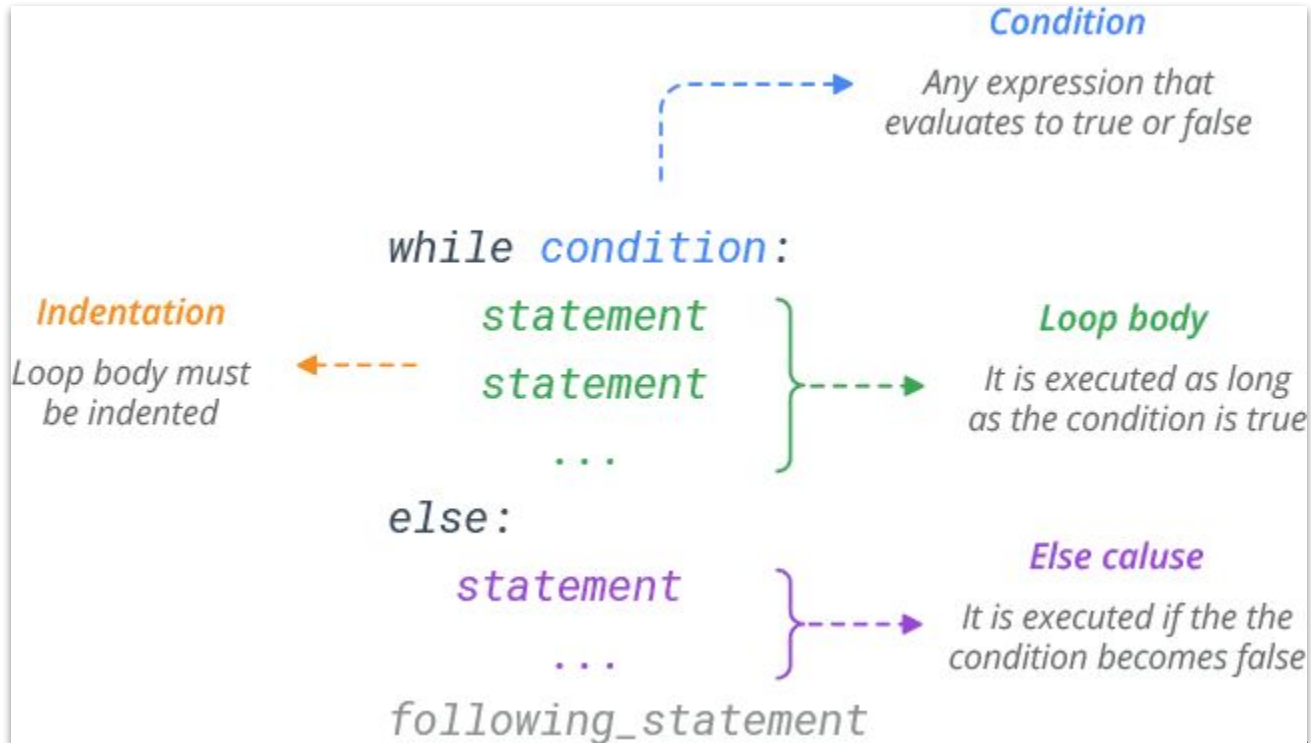
# Conditions - nested if, pass

```
if Test_expression_1:
    statement(s)
    if Test_expression_1:
        statement(s)
    else:
        statement(s)
else:
    statement(s)
```

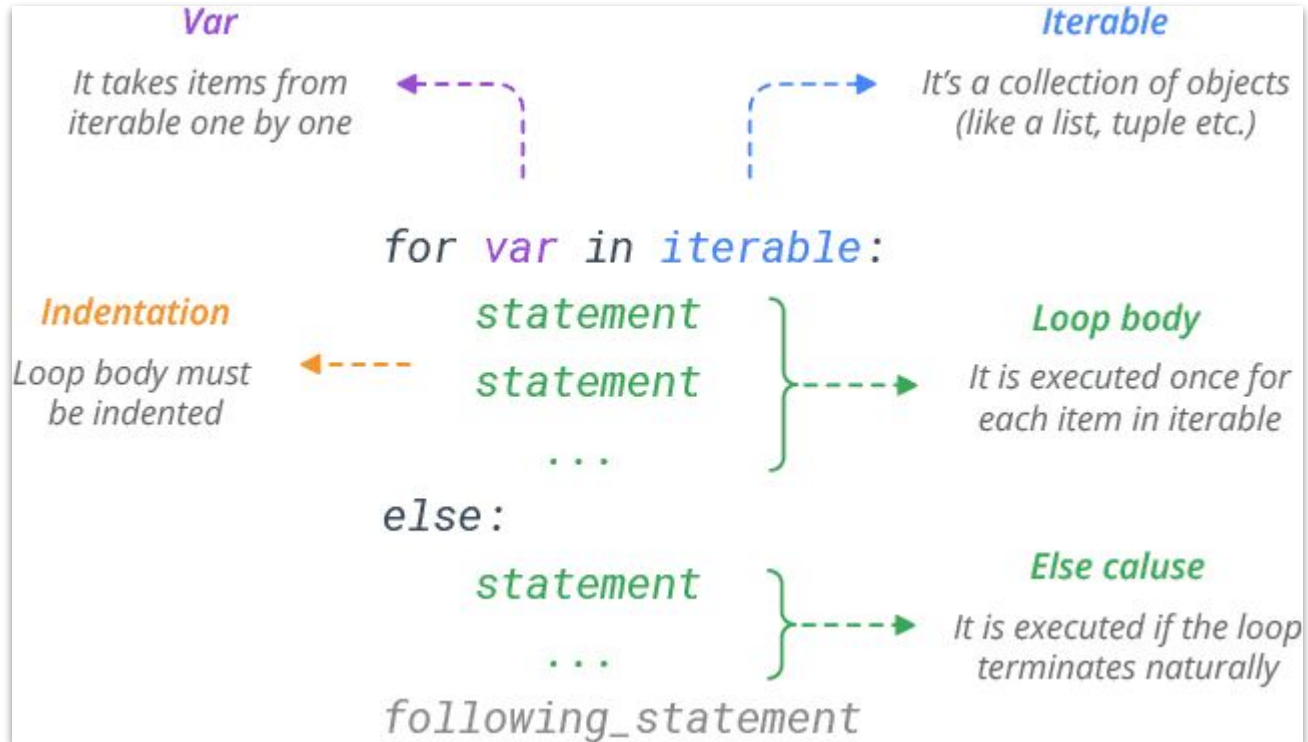
```
x = 0
if x > 0 :
    print ("x is +")
elif x < 0 :
    print ("x is -")
elif x ==0 :
    pass
else :
    print ("There is nothing to say!")
```



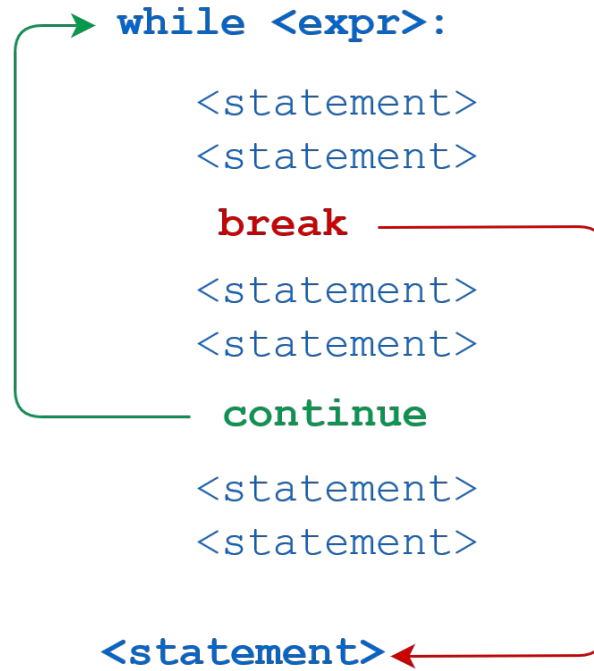
# Loops - while



# Loops - for



# Loops - break, continue



# Session Break

[GitHub Link](#)