



Python

basics

Comments

Ctrl + /

```
# This is a single line comment
```

```
a = 10 # This is a partial line comment
```

```
a = '''
```

```
Give  
multiple  
lines  
over  
here  
'''
```

Docstrings

```
a = """
```

```
Give  
multiple  
lines  
over  
here  
"""
```

Constants & Variables

`a = 10`

● lowercase for variables

`b = -25.3`

● lowercase for variables

`for = 56`

● cannot have keyword

`abc1 = 29`

● can contain numbers

`1abc = 29`

● cannot start with number

`my_super_big_var = 12`

● snake_case recommended

`mySuperBigVar = 12`

● camelCase used for Class

`my var = 12`

● cannot have space

`my-var = 12`

● cannot have special characters

`PI = 3.14`

● UPPERCASE for constants

this is a convention, not a rule
this is not enforced

Number Format

money = 10000000

money = 1_000_000 ←


money = 10_00_000 ←

money = 1e6 ←

length = 0.001

length = 1e-3 ←

underscores are
always ignored



Exponential notation



Operations

$a + b$

$a - b$

$a * b$

a / b

$a // b$

$a \% b$

$a ** b$

$a > b$

$a \geq b \rightarrow \geq$

$a < b$

$a \leq b \rightarrow \leq$

$a == b \rightarrow ==$

$a \neq b \rightarrow !=$

$a \text{ and } b$

$a \text{ or } b$

$\text{not } a$

Parenthesis

Exponent

Multiplication

Division

Addition

Subtraction

Bracket

Order

Division

Multiplication


Addition

Subtraction

Print & Input

```
print()
print(a)
print(a, b, c, d, e)
print(a, b, sep="--")
print(a, b, end="--")
print(a + "rupees" + in + "name" + bank)
print(f"{a} rupees in {name} bank")
a = input("Enter a number: ")
```

f-string is better



Datatypes

type()

<class 'int'>	1, -10, 23 ...
<class 'float'>	-2.3, 1.0, 4.92 ...
<class 'bool'>	True, False
<class 'str'>	'a', "cd", '12' ...

Conditionals

```
if  :  
      
elif  :  
      
elif  :  
      
else :  
    
```

Code

```
if  :  
      
elif  :  
      
elif  :  
      
else :  
    
```

1

```
if  :  
      
elif  :  
      
elif  :  
      
else :  
    
```

2

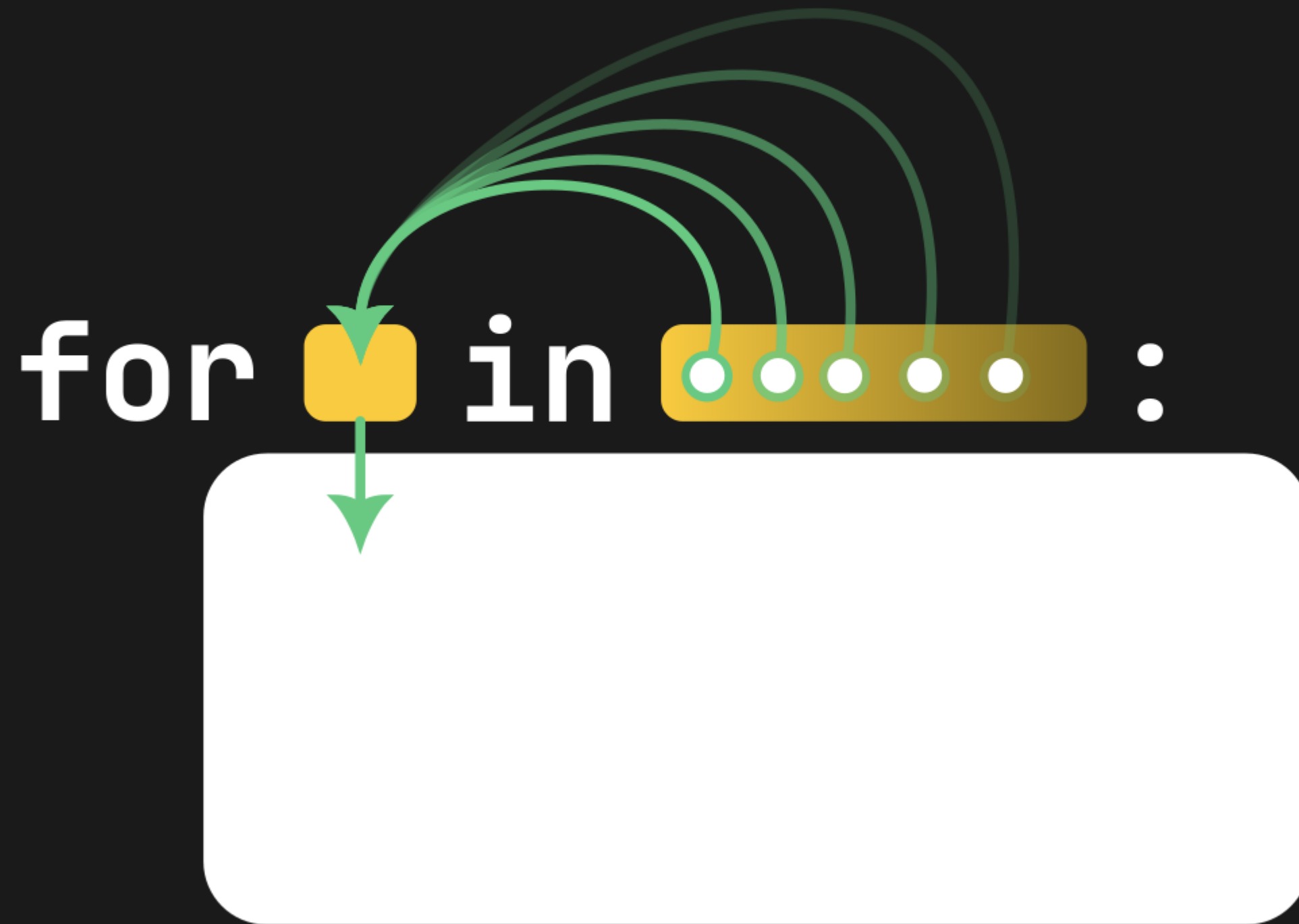
```
if  :  
      
elif  :  
      
elif  :  
      
else :  
    
```

3

```
if  :  
      
elif  :  
      
elif  :  
      
else :  
    
```

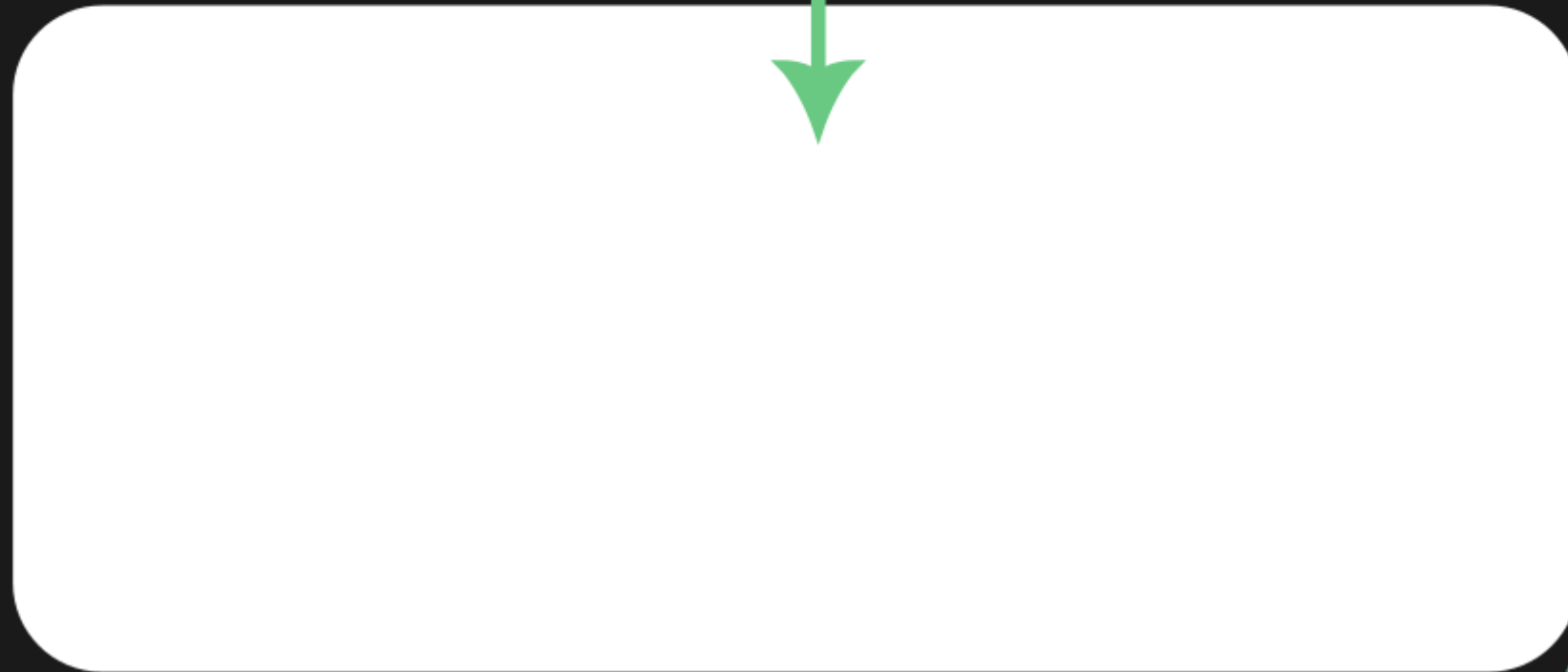
4

FOR loop



WHILE loop

while  :



List

<class 'list'>

```
car1 = "Audi"  
car2 = "BMW"  
car3 = "Mercedes"  
car4 = "Porsche"
```

```
cars = ["Audi", "BMW", "Mercedes", "Porsche"]
```

