



# Ilham Tech Python Cheat Sheet

## 1. Basic

### Print

```
In [1]: print("Hello World!")  
Hello World!
```

### Input

```
In [2]: nama = input("siapa nama anda?")  
siapa nama anda?elyas
```

### Comment

```
In [3]: # ini comment
```

### Operation

```
In [4]: 1 + 1
```

```
Out[4]: 2
```

```
In [5]: 1/2
```

```
Out[5]: 0.5
```

```
In [6]: 5-2
```

```
Out[6]: 3
```

```
In [7]: 5*2
```

Out[7]: 10

```
In [8]: 5**2
```

Out[8]: 25

```
In [10]: 5**3
```

Out[10]: 125

## Variables

```
In [12]: x = 1+2  
print(x)
```

3

```
In [13]: x = 3  
x += 2  
print(x)
```

5

## 2. Data Type

### Integer

```
In [14]: data_type_1 = 10  
print(type(data_type_1))
```

<class 'int'>

### Float

```
In [15]: data_type_2 = 10.52  
print(type(data_type_2))
```

<class 'float'>

### String

```
In [16]: data_type_3 = "ilham tech"  
print(type(data_type_3))
```

<class 'str'>

```
In [18]: # double quote  
  
print('Hello world! This is "ILHAM TECH"')
```

Hello world! This is "ILHAM TECH"

```
In [20]: # new line  
  
print("Hello world! \nThis is ILHAM TECH")
```

Hello world!  
This is ILHAM TECH

```
In [21]: # string concatenation

print("Hello World"+" THIS is ILHAM TECH")

Hello World THIS is ILHAM TECH
```

```
In [22]: #f-string

variable = "ILHAM"

print(f"This is {variable} TECH")

This is ILHAM TECH
```

## Data Type Conversion

```
In [25]: x = 10
print(type(float(x)))

<class 'float'>
```

```
In [26]: x = 10
print(type(str(x)))

<class 'str'>
```

## 3. Functions

```
In [27]: def my_function1(x):
        y = x * 3
        return y
```

```
In [28]: my_function1(9)
```

Out[28]: 27

```
In [29]: def my_function2(nama, umur):
        print(f"nama saya {nama}, umur saya {umur} tahun")
```

```
In [33]: my_function2("elyas", "28")

nama saya elyas, umur saya 28 tahun
```

```
In [31]: def my_function3():
        print("Hello World!")
```

```
In [32]: my_function3()

Hello World!
```

## 4. Conditions

```
In [34]: x = 4
if x > 2:
    print("x is greater than 2")

x is greater than 2
```

```
In [37]: y = 20

if y < 9:
    print("y is less than 9")
elif y < 15:
    print("y is less than 15")
else:
    print("y is greater than or equal to 15")
```

y is greater than or equal to 15

```
In [38]: a = 50

if a > 45 and a < 60:
    print("statement 1 is correct")
else:
    print("statement 1 is incorrect")
```

statement 1 is correct

```
In [40]: a = 30

if a > 45 or a < 60:
    print("statement 1 is correct")
else:
    print("statement 1 is incorrect")
```

statement 1 is correct

## 5. Loops

### For Loop

```
In [41]: list_fruits = ["apple", "orange", "durian", "banana", "grape", "lemon"]

for fruit in list_fruits:
    print(fruit)
```

apple  
orange  
durian  
banana  
grape  
lemon

```
In [45]: n = 5

for i in range(5):
    #print(i)
    n += i
    print(n)
```

5  
6  
8  
11  
15

### While Loop

In [46]:

```
n = 5

while n>0:
    n = n - 1
    print(n)
```

4  
3  
2  
1  
0