

Super Simple Python Cheat Sheet for Beginners

1. Printing Something (Show Output)

```
print("Hello!") # Prints: Hello!
```

2. Storing Information (Variables)

```
name = "Alice" # Text
age = 30        # Number
height = 5.6    # Decimal
is_happy = True # Yes/No (True or False)
```

3. Asking for User Input

```
name = input("What is your name? ")
print("Hello, " + name + "!")
```

4. Simple Math

```
a = 10
b = 3

print(a + b) # Add -> 13
print(a - b) # Subtract -> 7
print(a * b) # Multiply -> 30
print(a / b) # Divide -> 3.33
print(a ** b) # Power (103) -> 1000
```

5. Making Decisions (If Statements)

```
age = 18

if age >= 18:
    print("You can vote!")
else:
    print("You are too young to vote.")
```

6. Repeating Things (Loops)

```
# Repeat 5 times
```

```
for i in range(5):
    print("Hello!")

# Keep going until x is 5
x = 0
while x < 5:
    print(x)
    x += 1
```

7. Lists (Group of Items)

```
fruits = ["apple", "banana", "cherry"]
print(fruits[0]) # Shows: apple
fruits.append("orange") # Add new fruit
```

8. Dictionaries (Pairing Data)

```
person = {"name": "Alice", "age": 25}
print(person["name"]) # Shows: Alice
```

9. Functions (Reusable Code)

```
def say_hello(name):
    return "Hello, " + name + "!"

print(say_hello("Bob"))
```

10. Handling Errors (Try-Except)

```
try:
    x = 10 / 0 # This is an error!
except:
    print("Oops! Something went wrong.")
```

11. Working with Files

```
# Write to a file
with open("file.txt", "w") as f:
    f.write("Hello!")
```

```
# Read from a file  
with open("file.txt", "r") as f:  
    print(f.read())
```