

DIT gentle introduction to Python

2. Python 4 Poets

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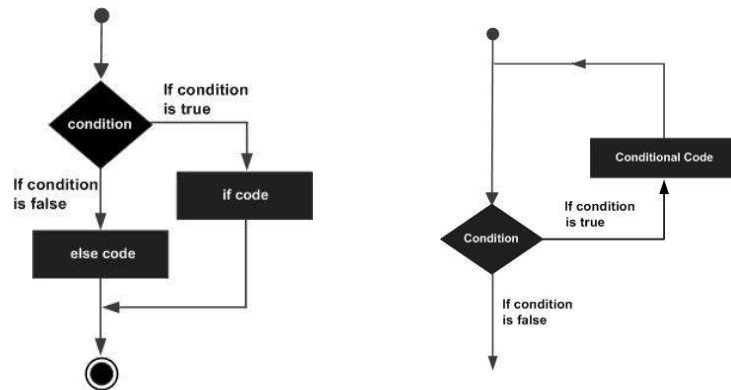


Programming



Diagram borrowed from L. Moroney's Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning

Conditionals and Loops



Diagrams borrowed from <https://www.tutorialspoint.com>

Functions (methods)

A simple function

```
def name_of_the_function(input1, input2):  
    # function code  
    none
```

Calling the function

```
name_of_the_function("hi", "ho")
```

Another valid call

```
name_of_the_function(hi, ho)
```

An invalid call

```
name_of_the_function(hi)
```

A simple method to *salute* people

```
greeting_inputs = ("hey", "morning", "evening", "hi",  
                  "whatsup", "hello")  
greeting_responses = ["hey", "hey hows you?", "*nods*",  
                      ,  
                      "hello, how you doing", "hello",  
                      "Welcome, I am good and you"]  
  
def generate_greeting_response(input):  
    for token in input.split():  
        if token.lower() in greeting_inputs:  
            return random.choice(greeting_responses)
```

- ▶ greeting_inputs is a **set**
- ▶ greeting_responses is a **list**

Derived from <https://stackabuse.com/python-for-nlp-creating-a-rule-based-chatbot/>

[//stackabuse.com/python-for-nlp-creating-a-rule-based-chatbot/](https://stackabuse.com/python-for-nlp-creating-a-rule-based-chatbot/)

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```

```
generate_greeting_response("hi")
```

```
generate_greeting_response("ciao")
```

From Unix to Python

- ▶ Kenneth W. Church's **Unix for poets**¹



Python for Poets

shorturl.at/stU36

¹<https://web.stanford.edu/class/cs124/kwc-unix-for-poets.pdf>