

AL NAFI,

A company with a focus on education, wellbeing and renewable energy.

"O Allah! I ask You for knowledge that is of benefit..."

اللهم انى أسالك علماً نافعاً و رزقاً طيباً و عملاً متقبلاً

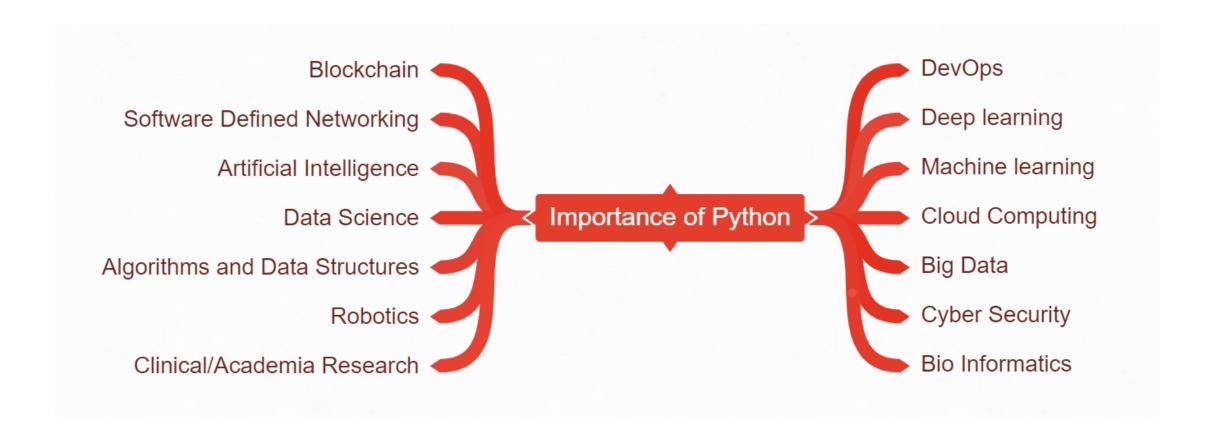
O Allah! I ask You for knowledge that is of benefit, a good provision and deeds that will be accepted.

[Ibn Majah]

Study, Rinse and Repeat

- Please subscribe to our <u>YouTube Channel</u> to be on top of your studies.
- Please keep an eye on zone@alnafi.com emails
- Please review the videos of 30 minutes daily
- Please review the notes daily.
- Please take time for clearing up your mind and reflect on how things are proceeding in your studies.

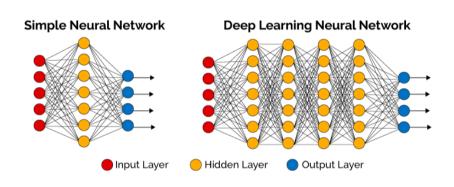
Role Of Python



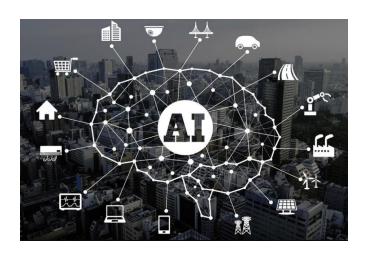
Role of Python



The Actual Role of Python













Python Penetration Testing





Calculations

Basic python operators

| Symbol | Operation |
|--------|----------------|
| + | Addition |
| - | Subtraction |
| * | Multiplication |
| / | Division |



The order of Operations

For example, in the following equation, the numbers 30 and 20 are multiplied first, and the number 5 is added to their product.

Using parentheses ()

Using Parentheses

• Parentheses can change the order of operations.

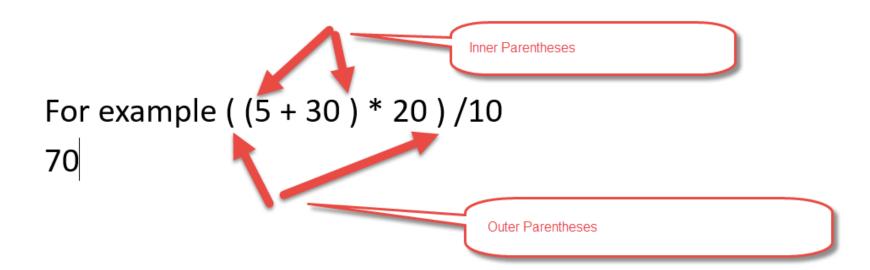
The order of Operations

This equation is another way of saying, "multiply 30 by 20, and then add 5 to the result." The result is 605. We can change the order of operations by adding parentheses around the first two numbers, like so:

The result of this equation is 700 (not 605) because the parentheses tell Python to do the operation in the parentheses first, and then do the operation outside the parentheses.

Nested Parentheses

Inner and outer Parentheses



In this case, Python evaluates the innermost parentheses first, then the outer ones, and then the final division operator. In other words, this equation is saying, "add 5 to 30, then multiply the result by 20, and divide that result by 10." Here's what happens:

- Adding 5 to 30 gives 35.
- Multiplying 35 by 20 gives 700.
- Dividing 700 by 10 gives the final answer of 70.

WARNING

Remember that multiplication and division always go before addition and subtraction, unless parentheses are used to control the order of operations.

Variables

Variable in programming means a place to store information such as numbers, text, list of numbers and text etc.

Its like variable is a label for something.

To create a variable name Ali, we use an equal sign =

For example Ali = 100 100

Variable names can be made up of letters, numbers and the underscore character (_), but they cant start with a number. You can use anything from single letters such as (a) to long sentences for variable names. But you cannot use space ()

A short name variable is best

Variable exercise

```
ali_coins=20
fahad_coins=10
abdullah_coins=10
```

ali_coins+fahad_coins+abdullah_coins

40



Please send us your questions at zone@alnafi.com We will only answer our Nafi Members. So please quote your membership number within the email.