

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

Python Primer 102d

Asking questions with IF and ELSE

Dua of the day

The righteous dua that Abu Bakr (r) made at the end of his lifetime.

"O Allah, let the best of my lifetime be its ending, and my best deed be that which I seal [my life with], and the best of my days the day I meet You."

Reference: The Dua is taken from Sheikh Omer Sulaiman Dua Compilation.

Study, Rinse and Repeat

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Difference between Strings and numbers

User input is what a person enters on the keyboard—whether that's a character, a pressed arrow or ENTER key, or anything else.

User input comes into Python as a string, which means that when you type the number 10 on your keyboard, Python saves the number 10 into a variable as a string, not a number.

What's the difference between the number 10 and the string '10'? Both look the same to us, with the only difference being that one is surrounded by quotes.

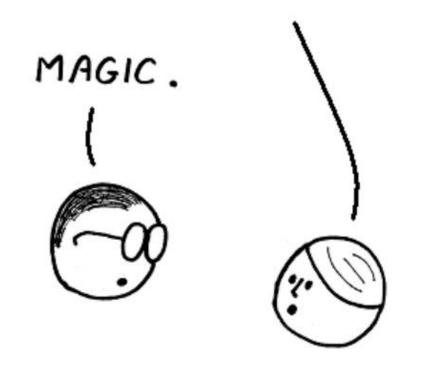
But to a computer, the two are very different. For example, suppose that we compare the value of the variable age to a number in an if statement, like this:

```
age=10
if age == 10:
    print("What's the best way to speak to a monster?")
    print("From as far away as possible!")
```

```
age='10'
if age == 10:
    print("What's the best way to speak to a monster?")
    print("From as far away as possible!")
```

Python Magic

HOW DOES COMPUTER PROGRAMMING WORK?



String into a number using int

Converting variables into numbers and numbers into variables

For example, you can convert the string '10' into a number with int:

Number into a string using str

The variable converted_age would now hold the number 10.

To convert a number into a string, use str:

```
age = 10
converted_age = str(age)
```

Example

```
age = '10'
converted_age = int(age)
if converted_age == 10:
    print("What's the best way to speak to a monster?")
    print("From as far away as possible!")
```

What if we use a number with a decimal?

```
age = '10.5'
converted_age = int(age)
if converted_age == 10:
    print("What's the best way to speak to a monster?")
    print("From as far away as possible!")
```

For decimal numbers use float

A ValueError is what Python uses to tell you that the value you have tried to use isn't appropriate.

To fix this, use the function float instead of int. The float function can handle numbers that aren't integers.

```
age = '10.5'
converted_age = float(age)
if converted_age == 10:
    print("What's the best way to speak to a monster?")
    print("From as far away as possible!")
```



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