

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

## Python Primer 102c

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

- Please subscribe to our <u>YouTube Channel</u> to be on top of your studies.
- Please logon to our website <a href="https://alnafi.com/login/">https://alnafi.com/login/</a>
- Use your username and password to logon
- Please keep an eye on <a href="mailto:zone@alnafi.com">zone@alnafi.com</a> 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.

## PYTHON

## JAVA





#### IF AND ELIF (else-if) STATEMENTS

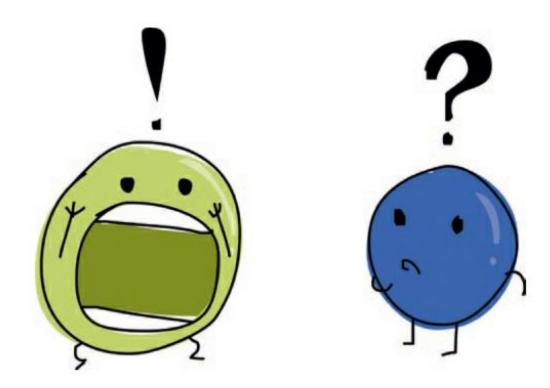
We can extend an if statement even further with elif (which is short for else-if).

For example, we can check if a person's age is 10, 11, or 12 (and so on) and have our program do something different based on the answer.

These statements are different from if-then-else statements in that there can be more than one elif in the same statement:

```
age = 12
if age == 10:
  print("What do you call an unhappy cranberry?")
  print("A blueberry!")
elif age == 11:
  print("What did the green grape say to the blue grape?")
  print("Breathe! Breathe!")
elif age == 12:
  print("What did 0 say to 8?")
  print("Hi guys!")
elif age == 13:
  print("Why wasn't 10 afraid of 7?")
  print("Because rather than eating 9, 7 8 pi.")
else:
  print("Huh?")
```

### **Combining Conditions**



You can combine conditions by using the keywords and and or, which produces shorter and simpler code. Here's an example of using or:

```
age=10

if age == 10 or age == 11 or age == 12 or age == 13:

    print('What is 13 + 49 + 84 + 155 + 97? A headache!')
else:
    print('Huh?')
```

```
age=15
if age == 10 or age == 11 or age == 12 or age == 13:
    print('What is 13 + 49 + 84 + 155 + 97? A headache!')
else:
    print('Huh?')
```

# Using greater than or equal-to operator (>=) and less-than-equal-to operator(<=)

```
age=10
```

if age >= 10 and age <= 13:

```
print('What is 13 + 49 + 84 + 155 + 97? A headache!')
```

else:

print('Huh?')

```
age=14
```

if age >= 10 and age <= 13:

print('What is 13 + 49 + 84 + 155 + 97? A headache!')

else:

print('Huh?')

#### Variables with no Value-None

Just as we can assign numbers, strings, and lists to a variable, we can also assign nothing, or an empty value, to a variable. In Python, an empty value is referred to as **None**, and it is the absence of value.

And it's important to note that the value None is different from the value 0 because it is the absence of a value, rather than a number with a value of 0. The only value that a variable has when we give it the empty value None is nothing. Here's an example:

#### None variable example

```
myval = None
if myval == None:
    print("The variable myval doesn't have a value")
```

This is useful when you only want to calculate a value for a variable if it hasn't already been calculated.



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.