Python Conditionals

Review the topic of conditionals and if statements in Python with this e-book. Check out the table of contents to navigate to each topic.

Contents

The if statement

Used to check if a conditional is `True`.

```
if <expr>:
    <statement>
```

Conditional expression that will be checked

Block of code that will be executed if the boolean value of the expression is `True`.

```
if name == friend:
    print(f"{name} is a friend")
```

❌

```
if name == friend:
print(f"{name} is a friend")
```

Missing indentation

❌

Missing an equal sign

```
if name = friend:
    print(f"{name} is a friend")
```

The elif keyword

Used for chaining multiple if statements

Only one of the branch bodies can run: the first one to evaluate to `True`.

```
if <expr>:
    <first_statement>
elif <expr>:
    <second_statement>
```

Tip: you can use more than one `elif` block

Examples

```
name = input("Enter a name: ")
if name == "Rolf":
    print(f"{name} is a best friend")
elif name == "Phil":
    print(f"{name} is a family member")
```

```
name = input("Enter a name: ")
if name == "Rolf":
    print(f"{name} is a best friend")
    elif name == "Phil":
        print(f"{name} is a family member")
```

Too much indentation in the last two lines

Extra Resources

1. What is an if statement?
2. What is a compound if statement?

The else keyword

Used to run a block of code if all the other if/elif statements have failed before it

We don't specify a condition with this keyword.

```python
if <expr>:
    <statement>
else:
    <statement>
```

Tip: you can use `elif` blocks before the `else` keyword

Examples

```python
name = "John"
if name == "Rolf":
    print(f"{name} is a best friend")
elif name == "Phil":
    print(f"{name} is a family member")
else:
    print(f"{name} is a stranger")
```

```python
name = input("Enter a name: ")
if name == "Rolf":
    print(f"{name} is a best friend")
elif name == "Phil":
    print(f"{name} is a family member")
    else:
        print(f"{name} is a stranger")
```

Too much indentation in the last two lines

Extra Resources

1. The else keyword