INFO5002: Intro to Python for Info Sys

Conditionals

PCC 71-85

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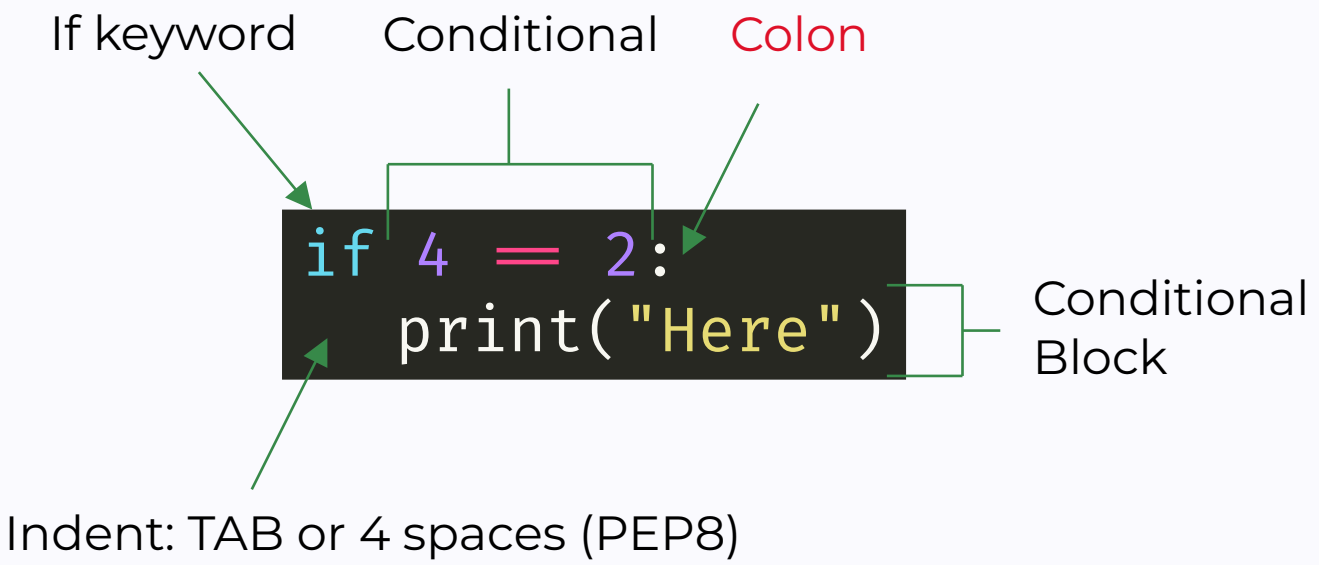
Conditionals protect the stack



3 Different Conditional Statements

- if which executes its conditional block if its condition evaluates to True.
- elif acts like if but creates another execution path.
- else acts as a *catch-all* and executes its conditional block if it is reached.

```
x = 4
if x < 4:
   print("Less than four")
elif x < 6:
   print("Less than six")
elif x <= 12:
   print("Less than or equal to 12")
elif x >= 13:
   print("Greater than or equal to 13")
else:
   print("I am something else")
```

Let’s practice conditionals

- Create the following function:

  I. age_group which takes in an age and if less than 2 returns “baby”, if between 2 and 4 return “toddler”, if greater than 4 and less than 12 return “kid”, if greater than or equal to 12 and less than 18 return “teen”, if greater than or equal to 18 and less than 65 return “adult”, if greater than or equal to 65 return “senior”.

And some more

- Create the following function:

  I. even which takes a number and prints “is even” if it is even, otherwise “is odd”.

  II. evenfy which takes a number and makes it even if it is odd by multiplying by 2.

  III. pair which takes in two numbers and prints “Paired” if both are even or if both are odd; otherwise, “Failed to Pair”.

Let’s practice recursion

- Create the following functions:

  I. countdown which will countdown from a given number down to 0 by printing.

  II. factorial which returns the factorial of a given number.

  III. fibonacci which returns the i’th fibonacci number.