Code with Me Meeting #8

code with me ♡

If... Else Statement

WHAT IS THE IF… ELSE STATEMENT:
- The If… Else statement lets us run a certain function or command IF a certain statement is true.
- Remember comparison operators and booleans? We will use those here.

HOW TO USE IT:
a = 13, b = 16
- ```
  if a>b:
       print("a is greater")
  ```
- This is a good example of the If statement.
  - It basically says if a statement is true, print out this statement.
  - As you can see, we've used a boolean and a comparison operator
- Example: ```if a==b:```
  ```
              print("Yay")
          else:
              print("Nope")
  ```
- This was a good example of the If… Else Statement

BOOLEANS IN THE STATEMENT:
- In these examples, we actually said if a certain statement is true, print Yay. If it's false (else), print Nope.
  - The above example makes use of the logical operator == (is equal to), and it actually uses a Boolean
- This is a boolean because it only runs the command if the statement is true.
  - If the statement is false, it runs a different command
  - And Booleans are basically true or false!
- The If… Else statement really depends on the Boolean

COMPARISON OPERATORS IN THE STATEMENT:
- We can use all the different comparison operators for an If… Else Statement.
- We can make `a=34` and `b=56`
- Then say, `if a>=b:`

```
    print("a is greater than b")
    else:
    print("a is less than b")
```

- This would work in a similar way for all different comparison operators.
- Don't comparison operators and booleans make a lot more sense now?

THE SYNTAX:
- By now, you may have gotten a gist of the syntax for the If… Else statement
- The syntax looks something like this:
  - ```
    if test expression:
        Body of if
    else:
        Body of else
    ```
- In the body, you would put a print function, or something you want the computer to carry out only if the statement is true.

INDENTATION:
- Remember to have proper indentation! This is super important!! If you don't indent properly, you will get an error.
- So the correct way to indent would be:

```
if condition:
    Statement to be carried out
else:
    Statement to be carried out.
```

- An indent is a big space (tab) before the statement to be carried

out
- So remember that proper syntax would involve
  - Proper indentation (i.e, tabs under the if and else parts)
  - Colons after the if condition and the else.

Activity:
1. Use the variables
   Burger = "I like burgers"
   Fries = "I like fries"
   If the Burger and Fries are (==), tell python to **print** out "Cool"
   Else tell python to **print** out "Those strings are not the same!"

2. Ask the user to input their age
   Subtract 5 from their age and print the new number

//new activity under construction don't worry about this one//
3. Ask the user to answer the question "How was your day?"
   If their answer is "Good", print out "That's awesome to hear!"
   If their answer is "Bad", print out "I'm sorry to hear that. Hope it gets better!"
   Else, print out "Oh I see."

4. Idea for activity:
   Ask the user how old they are.
   If they are older than 18 years old, print "You can vote!"
   Else, print "Sorry, you can't vote yet."