### COMPARISONS

## AND CONDITIONS

"If these new droids do work out, I want to transmit my application to the Academy this year" -Luke Skywalker

# WHAT IS A COMPARISION?

Comparators are

expressions that return either True or False.

```
anakian_mc_count = 20421
yoda_mc_count = 19632
c3po_mc_count = 0

print(anakian_mc_count > 20000)
print(anakian_mc_count < yoda_mc_count)

print(c3po_mc_count >= 1000)
print(0 == c3po_mc_count)
print(anakian_mc_count != 300)
print(not c3po_mc_count >= yoda_mc_count)
```

These are examples of Comparison operators. They do not set the value like the single equal (=) symbol does. Instead they always returns a True or a False

## WHAT IS A CONDITION?

Conditions evaluate an expression (often a comparison) to

determine if something is true or false and run code based on that result.

```
name = ""

if(True):
    name = "Yoda"

if(False):
    name = 'Jar Jar Binks'

print("%s knows how to use a lightsaber" % name)
```

The "if" looks at the expression inside of the parentheses and if it is true does the code inside the code block. Otherwise it ignores the code block.

- (!) We set the variable value to an empty string "" in python to use it later.
- True and False are both expressions. True will always be true and False will always be false.

```
star wars name = None
message = """
Greetings:
Please enter Galactic ID Username
11 11 11
star wars name = input(message)
if(star wars name != ""):
    print("Welcome %s your ID has been accepted." % star wars
else:
    print("You must enter an ID to proceed!")
print("End of Transmission >>>")
```

#### The else statement code block is run if the the statement was false.

- (None) is a way of creating a variable without a value.
- Palsy statments are None, False, 0, "", [], {}.
- Pressing Enter at the prompt without writing anything sends an empty string ("") so the 'star\_wars\_name' will return false.