Example #1 - Division with floats

print(10/3)

Example #2 - Division with integers

print(10//3)

Example #3 - Modulus

print(10%3)

Example #4 - Exponents

print(10\*\*3)

Example #5 - Incrementing

x = 10

x = x + 3

print(x)

Example #6 - Augmented assignment operator

x = 10

x += 3

print(x)

Example #7 - PEMDAS or Order of Operations

x = 10 + 3 \* 2

print(x)

Example #8 - OOO Example 2

x = 10 + 3 \* 2 \*\* 2

print(x)

Example #9 - OOO Example 3

x = (10 + 3) \* 2 \*\* 2

print(x)

Example # 10 - OOO Example 4

x = (2 + 3) \* 10 - 3

print(x)

Example #11 - Rounding

x = 2.9

print(round(x))

Example #12 - Absolute Value

x = 2.9

print(abs(-2.9))

Example #13 - Math module

import math

x = 2.9

print(round(x))

Example #14 - Ceil method

import math

print(math.ceil(2.9))

Example #15 - Floor method

import math

print(math.floor(2.9))

Example #16 - If statements

is\_hot = True

if is\_hot:

print("It's a hot day")

print("Drink plenty of water")

print("Enjoy your day!")

Example # 17 - If statements 2

is\_hot = False

if is\_hot:

print("It's a hot day")

print("Drink plenty of water")

else:

print("It's a cold day")

print("Wear warm clothes")

print("Enjoy your day!")

Example #18 - If statements 3

is\_hot = False

is\_cold = False

if is\_hot:

print("It's a hot day")

print("Drink plenty of water")

elif is\_cold:

print("It's a cold day")

print("Wear warm clothes")

else:

print("It's a lovely day")

print("Enjoy your day!")

Example #19 - If statements exercise

price = 1000000

has\_good\_credit = True

if has\_good\_credit:

down\_payment = .1 \* price

else:

down\_payment = .2 \* price

print("Down payment: ${down\_payment}".format(down\_payment = down\_payment))

Example # 19 - Logical and operator

has\_high\_income = True

has\_good\_credit = True

if has\_high\_income and has\_good\_credit:

print("Eligible for loan")

Example # 20 - Logical or operator

has\_high\_income = False

has\_good\_credit = True

if has\_high\_income or has\_good\_credit:

print("Eligible for loan")

Example #21 - Logical not operator

has\_good\_credit = True

has\_criminal\_record = False

if has\_good\_credit and not has\_criminal\_record:

print("Eligible for loan")

Example #22 - Greater than comparison operator

tempurature = 30

if tempurature > 30:

print("It's a hot day")

else:

print("It's not a hot day")

Example #23 - Greater than or equal to comparison operator

tempurature = 30

if tempurature >= 30:

print("It's a hot day")

else:

print("It's not a hot day")

Example #24 - Equality comparison operator

tempurature = 30

if tempurature == 30:

print("It's a hot day")

else:

print("It's not a hot day")

Example #25 - Not equal comparison operator

tempurature = 30

if tempurature != 30:

print("It's a hot day")

else:

print("It's not a hot day")

Example #26 - Less than or equal to comparison operator

tempurature = 30

if tempurature <= 30:

print("It's a cold day")

else:

print("It's not a cold day")

Example #27 - Less than operator

tempurature = 30

if tempurature < 30:

print("It's a cold day")

else:

print("It's not a cold day")

Example #28 - Comparison operator exercise

name = "J"

if len(name) < 3:

print("Name must be at least 3 characters")

elif len(name) > 50:

print("Name can be a maximum of 50 characters")

else:

print("Name looks good")

Example #29 - Weight Converter Program

weight = input("Weight: ")

Lbs\_or\_kg = input("(L)bs or (K)g: ")

if Lbs\_or\_kg == "L" or Lbs\_or\_kg == "l":

kg = int(weight) \* .45

print("You are {kg} kilograms".format(kg = kg))

elif Lbs\_or\_kg == "K" or Lbs\_or\_kg == "k":

lbs = int(weight) / .45

print("You are {lbs} pounds".format(lbs = lbs))

Example #30 - Weight Converter Program with upper method

weight = input("Weight: ")

Lbs\_or\_kg = input("(L)bs or (K)g: ")

if Lbs\_or\_kg.upper() == "L":

kg = int(weight) \* .45

print("You are {kg} kilograms".format(kg = kg))

elif Lbs\_or\_kg.upper() == "K":

lbs = int(weight) / .45

print("You are {lbs} pounds".format(lbs = lbs))

Example #31 - While loops

i = 1

while i <= 5:

print(i)

i = i+ 1

print("Done")

Example #32 - While loops 2

i = 1

while i <= 5:

print("\*" \* i)

i = i+ 1

print("Done")