

```

# We will learn about variables and assignments
# We will also do some arithmetic

#####
# VARIABLES TYPES
#####

# Integer
x_integer = 2

# Real
x_real = 2.
# They are called floating-point variable or float.
# So below, we also have a real number
y_real = float(5)
# Calculations with them are not infinitely precise.
# They are usually accurate up to 16 digits.
# Integers are more precise.
# Therefore, if the quantity you are storing is really an integer,
# store it as one

# Complex
x_complex = 2.0 + 3.0j
# Note: The unit imaginary number is called "j".
# Complex numbers take more memory of the computer.
# Computations with complex numbers that longer.

# You can change the types of variables
x = 76
x = 34.0
#####
# But this is considered poor programming.
#####

# Another type of variables is the string.
# It stores a text.
x_string = "A text is stored"

# To get the outputs, we need "print"
print("-----")
print("OUTPUTS")
print("-----")
print(x_real)
print(y_real)
print(x_real,y_real)
print("The value of the Real x is",x_real)
print("The value of the Real y is",y_real)
# To separate the variables, use "sep="
# followed by how you want them separated
print(x_real,y_real,sep="...")

```

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# We can also feed the code with some input
# For example, if we type
temp = input("Enter the value of temperature: ")
# The text will appear in the console and wait for the input
# before doing anything else.
# Once you type something, even if it is a number,
# the program will interpret it as a string.
# If you want to use it as a number for calculations.
# we need to convert it into a number with
temperature = float(temp)
temp4 = temperature**4
print()
print("-----")
print("OUTPUT from INPUT")
print("-----")
print("Temperature to the fourth: ",temp4)
# Note that you could have also imported and converted with a single line
temperature = float( input("Enter the value of temperature: ") )
temp4 = temperature**4
print()
print("-----")
print("OUTPUT from INPUT")
print("-----")
print("Temperature to the fourth: ",temp4)
```