

Activities 2: August 28, 2019

Expressions:

Write a script that prints out “hellohellohellohellohellohellohellohellohellohello” (11 hellos). Now create the same string, but with tabs (and then with newlines) after each hello.

Write a script that prints out the divisor and the remainder of the integer division of 123456789 by 98765. You can print out several entities by making them argument to the `print` function separated by commas.

Types:

We know three main types: `int`, `float`, and `str`. A simple programming pattern is a script that converts measurements between different measuring systems. It asks the user for input, (using the `input` function), converts the result of input — a string — to a numerical value, usually `float`, uses an algebraic formula to convert between measurement systems, and then prints out the new value.

Here is an example:

```
user = input("Enter a length in yards: ")
yards = float(user)
meters = yards*0.9144
print("The length is", meters, "meters")
```

You can save space by combining some of these lines.

Write programs that convert:

- Centimeters to inches
- Inches to millimeters
- Temperatures in Rankine to temperatures in Fahrenheit
- Forces in slugs to forces in Newton
- Gas consumption of a car from liters per kilometer to miles per gallon

Write a script that takes an integer such as 987, converts it into a string, then triplicates the string, e.g. 987987987, then divides the string by 3 rounding down to obtain an integer, obtaining in the example 329329329.