

CS118

Conditionals

In this assignment, do not forget that the = operator is for assignment and the == operator is for comparison.

IF / ELIF / ELSE

For the following exercises, use the IF/ELIF/ELSE conditional construct (remembering that you will not always need an ELIF or ELSE)

1. Write a Python3 program that collects from the user a single integer. Have the program print “EVEN” if the integer is divisible by 2, and “ODD” if the integer is not divisible by two. [Use the Python % operator to compute the remainder of division by two: The command $x = 5 \% 3$ will result in x having the value 2. A number is even if division by two results in a modulus (remainder) of 0.]
2. Write a Python3 program that collects from the user two integers. Have the program print “Yes” if the two integers are BOTH greater than 10. Do nothing if either is less than or equal to 10.
3. Make a copy of program #2 and modify it so that it prints “Yes” if BOTH integers are greater than 10, and prints “No” otherwise.
4. Make a copy of program #2 and modify it so that it prints “Yes” if EITHER integer is greater than 10.
5. Make a copy of Program #3 and modify it so that it prints “Yes” if EITHER integer is greater than 10 and ALWAYS prints “No” after that. (Conditionals are often thought of as controlling when things are executed. Sometimes it's better to consider them as controlling when things are NOT executed.)
6. (Comparing strings) Write a Python3 program that asks the user “Do you want to compute a square root? (Y/N)“. Using an IF statement: If the user chooses 'Y' or 'y', ask for a positive number and compute and display the square root [`math.sqrt()`] of that number to three decimal places. Do not do anything further if the user answers 'N' or 'n'. You may assume the user will not enter anything other than 'Y', 'y', 'N', or 'n' for the first question.