

HW 6: Conditionals

Note: I use the terms program, algorithm and recipe interchangeably.

1. Write relational expressions to express the following conditions (use variable names of your own choosing)
 - a. a person's age is equal to 30
 - b. a person's height is less than 6 feet
 - c. the current month is 6 (June)
 - d. the person's age is less than 30 *and* the person is taller than 6 feet
 - e. the person's id number is less than 500 or the person is older than 40 years
2. Write appropriate **Check if** statements for each of the following conditions (use variables of your own choosing)
 - a. If an angle is equal to 90 degrees, show the message "The angle is a right angle", otherwise the message that "The angle is not a right angle"
 - b. If the **number** is positive (more than zero), add the number to the variable **possum**, otherwise add the **number** to **negsum**.
 - c. If x is greater than y AND z is less than 20, then ask for value of p .
3. Write a recipe that asks the user to input two numbers (and store them in variables **firstnum** and **secondnum**, respectively). If the first number is greater than the second, show the value of the first number, otherwise show the value of the second number.
4. If money is left in a particular bank for more than two years, the interest rate given by the bank is 2.5%, else the rate is 1.5%. Write a recipe that asks for the number of years (**numyrs**) and displays the interest rate depending on the input value.
5. The standing of an undergraduate student at Hofstra is determined according to the following schedule.

Number of credits completed	Standing
Fewer than 30	Freshman
30 to 59	Sophomore
60 to 89	Junior
90 or more	Senior

Write a program that accepts the number of credits a student has completed and prints out the standing of the student.