

For this lab, and every lab: comment your code. If you use/adapt code from the internet, you must add a comment with the source of the code.

Reading:

Read the first half of Chapter 2, Flow Control. For the online edition, roughly half of this page, <https://automatetheboringstuff.com/2e/chapter2/>, everything up to until the While Loop Statements section.

Question 1:

Do you have a dollar?

Write a program that asks the user how many cents (penny coins) they have.

- If they have less than 100 cents, print the message 'you have less than a dollar'.
- Or, the user could have exactly 100 cents, so print the message 'you have exactly one dollar'
- Or, they could have more than 100 cents, so print the message 'you have more than one dollar'

(Bonus question, +3 points: extend your program to check if the user has an exact number of dollars in cents (penny coins), for example 100 or 300 or 700 pennies. Print a message if so. Hint: look up the modulo % operator. It's covered in Chapter 1 of the textbook.)

Question 2:

Can you be a senator?

Article I, Section 3 of the United States Constitution sets out three qualifications for senators:

- (1) they must be at least 30 years old,
- (2) they must have been citizens of the United States for at least the past nine years, and
- (3) they must live in the state they seek to represent at the time of their election.

Write a program that asks the user four questions:

- The state they want to be a senator in,
- Their age, as an int number,
- If they have been a citizen of the US for at least 9 years. Think about how you'll ask the user for this information.
- The state they currently live in. (to be eligible, this needs to be the same as the state they want to be the senator of).

Use an if statement, or statements, to check if they are eligible or not. You will need to check if the age ≥ 30 , and if the years of US citizenship ≥ 9 and if the state they want to be a senator $==$ state they currently live in.

Print one message telling the user if they are eligible to be a senator or not.

Optional extra question +3 points: extend your program to print the specific reasons why the person is not eligible.

For example, If a person is 45 years old, has been a US citizen for 10 years, lives in Minnesota and wants to represent Wisconsin, your program will print something like "You are not eligible because you live in a

different state"

For example, If a person is 16 years old, has been a US citizen for 2 years, lives in Minnesota and wants to represent Wisconsin, your program will print something like "You are not eligible because you are not old enough, you have not been a US citizen for long enough, you live in a different state"

To submit:

Upload the two .py files here [Lab 3 - If and Else](#)

Any questions on how to submit the lab? Please ask me ASAP.