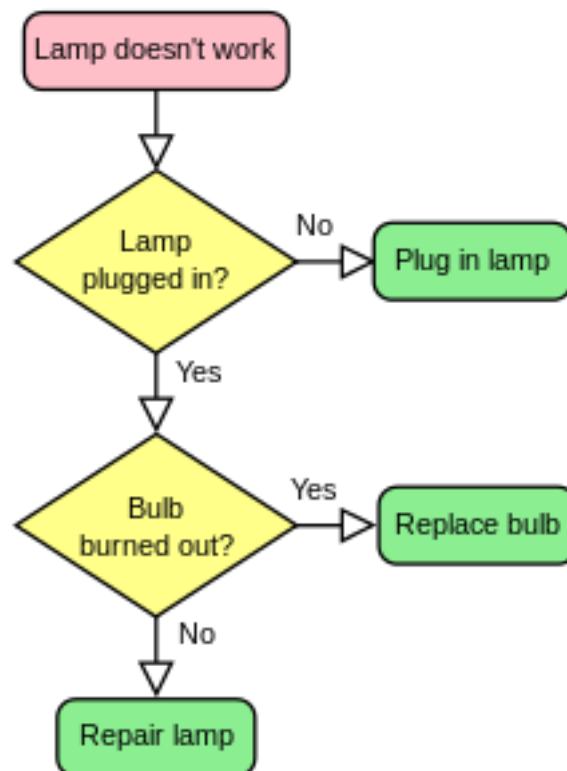


## Practice session 2

### IF statement and FOR loop

1) Write a program that asks the user how old they are. Tell them if they are old enough to vote. Then extend the program tell them how many years it is until they can retire (assume at age 65).

2) The following flowchart shows the underlying logic of a simple system you will implement. The program ask two questions: Lamp plugged in and Bulb burned out? The answer should be a number (0-no, 1-yes). The green boxes indicate a potential output.



3) Print a sequence of numbers between 4 and 20. Print all numbers first, then print every second number.

4) Define a sequence of numbers,  $x_n = n^2 + 1$ , for integers  $n = 0, 1, 2, \dots, N$ . Write a program that prints out  $x_n$  for  $n = 0, 1, \dots, N$  using a for loop. ( $n^2 = n**2$ ).  $N$  should be defined by the user.

5) Write a program that takes three numbers from the user and prints the largest of them.