How do trees get on a computer?

They just log in.

Source: https://heresajoke.com/computer-jokes/

Thank you, Jack
In-Class Activity

• Our in-class activity #5 -> 1%
  • Write your answer to question ____ on a sheet of paper
  • Write your lastname, firstname and student number
  • At the end of today’s class, hand in your sheet of paper in the appropriate pile:
    • **Pile 1** -> if your lastname start with a letter that is between ‘A’ and ‘L’
      • **Pile 1** is on your left-hand side of the classroom
    • **Pile 2** -> if your lastname start with a letter that is between ‘M’ to letter ‘Z’
      • **Pile 2** is on your right-hand side of the classroom

Course grading scheme on our course website: *Best 7 in-class exercises out of 10: 1% each, for a total of 7%*
Theory and Understanding

Try to answer the questions 1st without using your computer, then confirm your answer using IDLE!
Operations and Precedence

1. What does \texttt{print(1+2+3+4)} print on the computer monitor screen?

2. What does \texttt{print(1-2*3+4)} print on the computer monitor screen?

3. What does \texttt{print(25 - 16 * 8 + 6 // 3)} print on the computer monitor screen?

4. What does \texttt{print((8 // 3 + 6 * 5) % 11)} print on the computer monitor screen?
5. Write the header of a Python function which, given a list of numbers, figures out which of the numbers in the list is the smallest.

6. Write the header of a Python function that prints a circle of a given radius and of a given colour using a given turtle.

Warning for the above two questions: Do not write more than what the question is asking for.
Tuples

Consider the following tuple:

```python
allSorts = ('Paris', 3.1416, [1,2,3], True, 58)
```

7. What does `allSorts[1:3]` print on the computer monitor screen?

8. What does `allSorts[0]` print on the computer monitor screen?

9. What does `allSorts[::2]` print on the computer monitor screen?
Consider the program
Right now, we are using the following test case:

**Test Case:**
- Test Data: 78
- Expected result: C
to test it. But we need more!

Write all the test cases (there are 5 in total – including the test case above) we would need in order to test this program completely, i.e., to have all the statements in the program executed at least once.
Try to solve the problem (i.e., write your Python program) 1st on a piece of paper without using your computer!
Problem Statement:

Write a program that calls your Palindrome function (from Practice Exam #4 Question 9) and prints

That’s a palindrome!

when the function returns True and

That’s no palindrome!

when then function returns False.

Here are 3 sample runs:

Enter a word to check: alf33fla
That’s a palindrome!

Enter a word to check: PEPPER
That’s no palindrome!

Enter a word to check: pop
That’s a palindrome!

The program terminates when the user enters an empty string.
Question 12 - Strange Calculator

• **Problem Statement:**
  • Write a program that takes a string as an input, such as “24 + 16”, “30 – 5”, “10 * 4”, 36 // 2”, computes the equation found in the string and outputs the equation and its result such as
    \[ 24 + 16 = 40 \]

• **Requirements:**
  • Note that the numbers (24, 16 and 40) in the output above (24 + 16 = 40) are no longer strings, but integers.
  • Your program cannot use the function `eval()`, but it can use the function `split()`.

• **Hint:**
  • You may find `OperationsOnList.py` inspiring. This program is posted under Lecture 18 on our course website.