

Due date

Sunday 9/4 with Lab 2

By the end of this Lab, you should know how:

- ☐ To use a terminal
 - ☐ To find and input syntax
 - ☐ Display screen messages
 - ☐ Identify different data types
 - ☐ Identify the length of a string
 - ☐ Manage numerical data types
 - ☐ Create comments
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Lab I

Starting with Python

ONE: 0001

Once in the terminal, write the syntax of a command that displays the phrase “Hello World!” on the monitor.

- a) Write one command in [a] Python.
- b) Now, write the command in Java,
- c) Write command in C++, and
- d) in any other programming language that you choose.

Report the results of the three cases.

TWO: 0010

Write the syntax of a command that makes displays your full name on the monitor. Write one command in Python.

THREE: 0011

Write the syntax of a command that makes display and empty space.

FOUR: 0100

Calculate the length of these strings:

- a) Python
- b) My favorite number is nine.
- c) In 2022, Python 3.10.4 and 3.9.12 were expedited and so were older releases including 3.8.13, and 3.7.13 because of many security issues in 2022. Python 3.9.13 is the latest 3.9 version, and from now on 3.9 (and older; 3.8 and 3.7) will only get security updates.

FIVE: 0101

Calculate the following operations directly in the terminal without importing any math module or [in the case you have already installed] not using the math methods of the math module.

- a) 9988870 multiplied by 303
- b) 34199820 divided by 2121.4
- c) $9988870 + 34199820 + 2121.4$
- d) $9988870 + 34199820 + 2121.4$ divided by 2
- e) $130 + 45 - 12$ divided by $98 * 2$
- f) $332,403,650 - 332,524,270$

SIX: 0110

I am organizing a hackathon. I have 325 participants and want to create teams of 6 students. How many complete teams do I have, and how many participants will work in a team with fewer participants?

SEVEN: 0111

- a) The logarithm of 10
- b) The square root of 255
- c) The greatest common divisor of 200 and 25
- d) I am organizing a hackathon. I have 325 participants and want to create teams of 6 students. How many complete teams do I have, and how many participants will work in a team with fewer participants? [it is not Deja-vu, now calculate the results with the *math.methods*].

EIGHT: 1000

Evaluate if these statements are true or false:

$89 == 87$

$332433240365003633240365050 != 332433240365003633240365050$

$332433240365003633240365050 == 332433240365003633240365050$

$89 > 89$

89 > 89

89 == 89

89 >= 89

89 <= 89

89 == '89'

89 != '89'

True == True

True == 'True'

'Hello World!' == 'Hello World!'

"In 2022, Python 3.10.4 and 3.9.12 were expedited and so were older releases including 3.8.13, and 3.7.13 because of many security issues in 2022. Python 3.9.13 is the latest 3.9 version, and from now on 3.9 (and older; 3.8 and 3.7) will only get security updates." == "In 2022, Python 3.10.4 and 3.9.12 were expedited and so were older releases including 3.8.13, and 3.7.13 because of many security issues in 2022. Python 3.9.13 is the latest 3.9 version, and from now on 3.9 (and older; 3.8 and 3.7) will only get security updates."

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NINE: 1001

Display a text by using string concatenation. Use at least one number in number format and convert it into a string.

TEN: 0110

Write the same scripts with at least five mistakes. Explain the mistakes by using #comments.