

***Please study the slides of CS1101 (first-year python lab) shared with you at WeLearn before trying to solve the following questions.**

**** You must try to execute the solutions of these questions in your Python3 IDEs/compilers.**

*****These are ungraded and are only for practice (you don't have to submit their solutions to WeLearn)**

****** The initial Sets are to help students brush up on their CS1101 knowledge.**

******* The next sets will contain some new concepts taught in CS2201 Theory/Tutorial classes (Fri)**

Set 1

Q1) Lists

- (a) Create a list of integers from 0 to 9 and store the list in variable x
- (b) Create a list of integers from 3 to 12 and store the list in variable y
- (c) Using a single print command, print the list in x in reverse
- (d) Using a single print command, print the list of odd entries (starting from index 1) in x and then the list of even entries (starting from index 0) in x
- (e) Check whether the 4th item of x (0th index element is the 1st element) is same as the 1st item of y by extracting those items
- (f) Print the location of the number 10 in the list x using index()
- (g) Print the location of the number 7 in the list y using index()
- (h) Get a combined (appended) list of the items of x and y

(i) Create a combined list that consists of x and y. Find the location of the maximum and minimum numbers in this combined list (use max() and min()).

Q2) Strings are lists

(a) Store a string: "The quick brown fox jumps over the lazy dog" in a variable x

(b) Check whether the word "fox" is in this sentence

(c) Print the sentence in reverse order

(d) Print every third character of the above sentence (0th, 3rd, 6th....characters).

(e) Print every fourth character of the above sentence (0th, 4th, 8th...characters).

(f) Find how many characters are there in the sentence (including spaces)

(g) Print every second character of the sentence starting from the last character in reverse order

(h) Store the first four characters of x in a variable y and the last three letters in a variable z.

Print the output of y + z

(i) Print the output of y*10

Q.3 Miscellaneous

a) Print 'Hello World' on the screen

b) Add a comment to the above program

c) Store your name (e.g. Tintin), age (e.g. 20) and roll number (e.g. 20MS1234) in three variables and print them separately and also together like *Hello! My name is Tintin . I am 20 years old. My roll number is 20MS1234* using these variables. Use string concatenation.

d) Take two number strings as input and print their sum

e) Take two integers as input and print their sum

f) Use print() to print the statement -- It's good to learn Python

g) Use print() to print the statement -- The man asked, "Where to meet you?" I said, "Well, use Google Meet!"

h) Store an integer, floating point number and character in different variables and print the data type of each variable.

i) Take your name (e.g. Feluda) in the variable 'Name' as input and print *My name is Feluda* using Name and string concatenation. Do the same using %s.

Q4. Write a Python function that takes two lists and returns True if they have at least one common member.

Q5. Write a Python program to convert a list of characters into a string.

Q6. Write a Python program to remove the K'th element from a given list, and print the updated list.

Original list:

[1, 1, 2, 3, 4, 4, 5, 1]

After removing an element at the kth position of the said list:

[1, 1, 3, 4, 4, 5, 1]