

CS1101 Assignment01

Q 1) Exploring lists

- (a) Type python to start a python shell
- (b) Create a list of integers from 0 to 9 and store the list in variable x
- (c) Create a list of integers from 3 to 12 and store the list in variable y
- (d) Using a single print command, print the list in x in reverse
- (e) Using a single print command, print the list of odd entries in x and then the list of even entries in x
- (f) Check whether the 4th item of x is same as the 1st item of y by extracting those items
- (g) Check whether the number 10 is in the list x
- (h) Check whether the number 7 is in the list y
- (i) Get a combined list (added) of the items of x and y
- (j) After reversing the list x, create a combined list that consists of the reversed x and original y. Find the location of the maximum and minimum numbers in this combined list.

Q 2) 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
- (e) Print every fourth character of the above sentence
- (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 character of x in a variable y and the last three letters in a variable z.

Check the output of $y + z$

- (i) Check the output of $y * 10$

Q 3) Numbers

- (a) Store 1.2 in a variable x
- (b) Store 12 in a variable y
- (c) Store 24 in a variable z
- (d) Check the output of x/y , y/z and z/x . Are all of them float?
- (e) Find 7th power of 3
- (f) Check whether $2.0**3$ is equal to 8.0
- (g) Compare outputs of $y+z$ and $\text{str}(y)+\text{str}(z)$

Q.4 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. 21MS1234) 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 21MS1234* using these variables.

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) Print the data type of a variable

i) Take your name (e.g. Feluda) in the variable 'Name' as input and print *My name is Feluda* using Name.

j) Take name (e.g. Sherlock), age (e.g. 40) and gender (e.g. Male) as input in variables and print *Good Morning Sherlock! You are a Male of 40 years.* using these variables.