

Assignment Day 2 | 9th November 2020

For any doubts regarding the assignment, ask questions in the [Data Science 101 B1](#) Group in the Community.

Submit Assignments by **16th November 2020 11:59 PM.**

Assignment Submit Form : <https://letsupgrade.in/ds101submission>

Submit assignments in Appropriate Dropdowns.

Questions 1:

Create an empty list. Accept 10 numbers from the user and append to it the list if it is an even number.

Questions 2:

Create a notebook on LIST COMPREHENSION. This exercise is to put you in a Self learning mode

Questions 3:

You have seen in the videos how powerful dictionary data structure is.

In this assignment, given a number n , you have to write a program that generates a dictionary d which contains $(i, i*i)$, where i is from 1 to n (both included).

Then you have to just print this dictionary d .

Example:

Input: 4

will give output as

{1: 1, 2: 4, 3: 9, 4: 16}

Input Format:

Take the number n in a single line.

Output Format:

Print the dictionary d in a single line.

Example:

Input:

8

Output:

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}

Questions 4:

There is a robot which wants to go the charging point to charge itself.

The robot moves in a 2-D plane from the original point (0,0). The robot can move toward UP, DOWN, LEFT and RIGHT with given steps.

The trace of robot movement is shown as the following:

UP 5

DOWN 3

LEFT 3

RIGHT 2

Then, the output of the program should be:

2

The numbers after the direction are steps.

Write a program to compute the distance between the current position after a sequence of movement and original point. If the distance is a float, then just print the nearest integer (use round() function for that and then convert it into an integer).

Input Format:

The first line of the input contains a number n which implies the number of directions to be given.

The next n lines contain the direction and the step separated by a space.

Output Format:

Print the distance from the original position to the current position.

Example:

Input:

4

UP 5

DOWN 3

LEFT 3

RIGHT 2

Output:

2

FAQs

Q. How to upload a jupyter notebook as a part of an assignment?

- A. 1. Click "File" option in notebook
2. Go to "Download As" -> "Notebook(.ipynb)"
3. Upload the downloaded .ipynb file to github and share the link in google form.

Q. When do I submit the Assignments and how?

- A. The assignments for the week should be submitted by 16th November, Monday 11:59 PM IST.
You can use Jupyter Notebook or python files or even Google Colab to Solve your Assignments

Q. Where do I get class links for next session?

- A. All sessions will be Live on our Youtube Channel. It will be also updated in the Community Group in the pinned post.

Q. I have some doubt, whom do I ask?

- A. Post your Queries on the community, someone will help you out.

Q. *Sir don't have anaconda so how can I solve the assignment ?*

- A. Use Google Colab : [Click me](#)

Q. Can we submit multiple .py or .ipynb assignment solution files for each question separately?

- A. Solve all assignments for a day in a single notebook. Make sure you are submitting a single file.