

Day 5 Assignments

Q1.

You have seen 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}

Explanation:

Here **n** is 8, we will start from **i=1**, hence the first element of the dictionary is (**1: 1**), as **i** becomes **2**, the second element of the dictionary becomes (**2: 4**) and so on.

Hence the output will be **{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}**.

Q2.

You have also seen how list slicing is performed in python.

In this program, create a list of numbers from 1 to 50 named **list_1**. The numbers should be present in the increasing order: Ex **list_1 = [1,2,3,4,5,.....,50]**

i.e. index zero should be 1, index one should be 2, index two should be 3 and so on.

Given an input of two numbers, let's say **a** and **b**, you have to print the numbers returned by the following command

list_1[a:b]

Input:

The first line of input contains two numbers **a** and **b** separated by a space.

NOTE: You can take two inputs in a single line using the following command:

a, b = input().split()

Make sure you convert the strings in **a** and **b** into integers using the **int()** command

Output:

Print the numbers in new line

Example:

Input:

2 6

Output:

3

4

5

6

Explanation: In this example, **a** is 2 and **b** is 6. The **list_1** contains numbers from 1 to 50. When you perform the operation **list_1[a:b]** which in this case is, **list_1[2:6]**, it returns a list of following numbers [**3, 4, 5, 6**]. Print the elements of this list with each element in a new line.

Regards,

Dr. Darshan Ingle.