

Course outline

How does an NPTEL online course work?

Week 1

Week 2

Week 3

week 4

- ☐ Practice is the key (unit? unit=78&lesson=79)
- ☐ Magic Square: Hit and Trial 01 (unit?unit=78&lesson=80)
- ☐ Magic Square: Hit and Trial 02 (unit?unit=78&lesson=81)
- ☐ Magic Square: Hit and Trial 03 (unit?unit=78&lesson=82)
- ☐ Magic Square: Hit and Trial 04 (unit?unit=78&lesson=83)
- ☐ Magic Square: Hit and Trial 05 (unit?unit=78&lesson=84)
- ☐ Let's program and play (unit? unit=78&lesson=85)
- ☐ Dobble Game - Spot the similarity 01 (unit? unit=78&lesson=86)
- ☐ Dobble Game - Spot the similarity 02 (unit? unit=78&lesson=87)
- ☐ Dobble Game - Spot the similarity 03 (unit? unit=78&lesson=88)
- ☐ Dobble Game - Spot the similarity 04 (unit? unit=78&lesson=89)
- ☐ What is your date of birth? (unit?unit=78&lesson=90)
- ☐ Birthday Paradox - Find your twin 01 (unit? unit=78&lesson=91)
- ☐ Birthday Paradox - Find your twin 02 (unit? unit=78&lesson=92)
- ☐ Birthday Paradox - Find your twin 03 (unit? unit=78&lesson=93)
- ☐ Birthday Paradox - Find your twin 04 (unit? unit=78&lesson=94)
- ☐ Birthday Paradox - Find your twin 05 (unit? unit=78&lesson=95)
- ☐ What's your favourite movie? (unit?unit=78&lesson=96)
- ☐ Guess the Movie Name 01 (unit?unit=78&lesson=97)
- ☐ Guess the Movie Name 02 (unit?unit=78&lesson=98)

Programming Assignment 3: Order in Randomness

Due on 2020-10-15, 23:59 IST

You all have used the random library of python. You have seen in the screencast how powerful it is. In this assignment, you will sort a list let's say **list_1** of numbers in increasing order using the random library.

Following are the steps to sort the numbers using the random library.

Step 1: Import the randint definition of the **random** library of python. Check this (https://www.codecademy.com/en/forum_questions/55c1eabde39efed2110002ae) page if you want some help.

Step 2: Take the elements of the **list_1** as input.

Step 3: randomly choose two indexes **i** and **j** within the range of the size of **list_1**.

Step 4: Swap the elements present at the indexes **i** and **j**. After doing this, check whether the **list_1** is **sorted or not**.

Step 5: Repeat step 3 and 4 until the array is **not sorted**.

Input Format:

The first line contains a single number **n** which signifies the number of elements in the **list_1**. From the second line, the elements of the **list_1** are given with each number in a new line.

Output Format:

Print the elements of the **list_1** in a single line with each element separated by a space. NOTE 1: There should **not** be any space after the last element.

Example:

Input:

```
4
3
1
2
5
```

Output:

```
1 2 3 5
```

Explanation:

The first line of the input is **4**. Which means that **n** is **4**, or the number of elements in **list_1** is **4**. The elements of **list_1** are **3, 1, 2, 5** in this order.

The sorted version of this list is **1 2 3 5**, which is the output.

NOTE 2: There are many ways to sort the elements of a list. The purpose of this assignment is to show the power of randomness, and obviously the Joy.

Select the Language for this assignment. Python3 ▾

```
1 n=int(input())
2
3 listOne = []
4
5 for i in range(n):
6     listOne.append(int(input()))
7
8 listTwo=[]
9
10 while listOne:
11     minimum = listOne[0]
12     for x in listOne:
13         if x < minimum:
14             minimum = x
15     listTwo.append(minimum)
16     listOne.remove(minimum)
17 sarr = [str(a) for a in listTwo]
18 print(' '.join(sarr), end='')
```

You may submit any number of times before the due date. The final submission will be considered for grading.

This assignment has Public Test cases. Please click on "Compile & Run" button to see the status of Public test cases. Assignment will be evaluated only after submitting using Submit button below. If you only save as or compile and run the Program , your assignment will not be graded and you will not see your score after the deadline.

Save as Draft

Compile & Run

Submit

Reset

- ☐ Guess the Movie Name 03
(unit?unit=78&lesson=99)
- ☐ Guess the Movie Name 04
(unit?unit=78&lesson=100)
- ☐ Guess the Movie Name 05
(unit?unit=78&lesson=101)
- ☐ Guess the Movie Name 06
(unit?unit=78&lesson=102)
- ☒ Programming Assignments 1:
Matrix
(/noc20_cs83/progassignment?
name=286)
- ☒ Programming Assignment - 2:
Large Numbers
(/noc20_cs83/progassignment?
name=287)
- ☒ Programming Assignment 3:
Order in Randomness
(/noc20_cs83/progassignment?
name=288)
- ☐ Quiz : Assignment 4
(assessment?name=296)

Text Transcripts

Download Videos

Books

Compilation : Passed

Public Test Cases: 3 / 3 Passed

Note: These tests may not be considered while scoring. Know more.

Public Test Cases	Input	Expected Output	Actual Output	Status
Test Case 1	2 4 3	3 4	3 4	Passed
Test Case 2	3 4 9 1	1 4 9	1 4 9	Passed
Test Case 3	4 10 3 7 6	3 6 7 10	3 6 7 10	Passed