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**NPTEL** (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » **The Joy of Computing using Python (course)**

Announcements (announcements)

**About the Course** ([https://swayam.gov.in/nd1\\_noc20\\_cs35/preview](https://swayam.gov.in/nd1_noc20_cs35/preview)) Ask a Question (forum)

Progress (student/home) Mentor (student/mentor)

# Programming Assignment-1: Computing Paradox

**Due on 2020-03-12, 23:59 IST**

Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

week 4

Week 5

Week 6

- Substitution Cipher -The science of secrecy (unit? unit=103&lesson=104)
- Substitution Cipher -The science of secrecy 01

- (unit? unit=103&lesson=105)
- Substitution Cipher -The science of secrecy 02 (unit? unit=103&lesson=106)
- Substitution Cipher -The science of secrecy 03 (unit? unit=103&lesson=107)
- Tic Tac Toe - Down the memory Lane (unit? unit=103&lesson=108)
- Tic Tac Toe - Down the memory Lane 01 (unit? unit=103&lesson=109)
- Tic Tac Toe - Down the memory Lane 02 (unit? unit=103&lesson=110)
- Tic Tac Toe - Down the memory Lane 03 (unit? unit=103&lesson=111)
- Tic Tac Toe - Down the memory Lane 04 (unit? unit=103&lesson=112)
- Tic Tac Toe - Down the memory Lane 05 (unit? unit=103&lesson=113)
- Recursion (unit? unit=103&lesson=114)
- Recursion 01 (unit? unit=103&lesson=115)
- Recursion 02 (unit? unit=103&lesson=116)

You are provided with a playlist containing **N** songs, each has a unique positive integer length. Assume you like all the songs from this playlist, but there is a song, which you like more than others. It is named "Computing Paradox".

You decided to sort this playlist in increasing order of songs length. For example, if the lengths of the songs in the playlist were {1, 3, 5, 2, 4} after sorting it becomes {1, 2, 3, 4, 5}.

Before the sorting, "Computing Paradox" was on the **k<sup>th</sup>** position (1-indexing is assumed for the playlist) in the playlist.

Your task is to find the position of "Computing Paradox" in the sorted playlist.

**Input Format:**

The first line contains two numbers **N** denoting the number of songs in the playlist.

The second line contains **N** space separated integers **A<sub>1</sub>, A<sub>2</sub>, A<sub>3</sub>,..., A<sub>N</sub>** denoting the lengths of songs.

The third line contains an integer **k**, denoting the position of "Computing Paradox" in the initial playlist.

**Output Format:**

Output a single line containing the position of "Computing Paradox" in the sorted playlist.

**Example:**

**Input:**

```
4
1 3 4 2
2
```

**Output:**

```
3
```

**Explanation:**

N equals to 4, k equals to 2, A equals to {1, 3, 4, 2}. The answer is 3 because {1, 3, 4, 2} -> {1, 2, 3, 4}.

**Sample Test Cases**

	Input	Output
Test Case 1	<pre>16 11 22 33 21 47 37 23 14 32 2 3 1 6 45 24 16 1</pre>	5
Test Case 2	<pre>6 1 2 3 4 5 7 6</pre>	6

<input type="radio"/> Recursion 03 (unit? unit=103&lesson=117)	Test Case 3	6 39 45 7 24 30 32 3	1
<input type="radio"/> Recursion 04 (unit? unit=103&lesson=118)	Test Case 4	5 1 2 3 9 4 5	4
<input type="radio"/> Recursion 05 (unit? unit=103&lesson=119)	Test Case 5	5 1 2 3 9 4 1	1
<input type="radio"/> Recursion 06 (unit? unit=103&lesson=120)	Test Case 6	6 1 3 5 2 4 6 3	5

- Programming Assignment-1: Computing Paradox**  
(/noc20\_cs35/progassi  
name=295)
- The due date for submitting this assignment has passed.  
As per our records you have not submitted this assignment.  
Sample solutions (Provided by instructor)

```

1 n=int(input())
2 a=[int(x) for x in input().split()]
3 k=int(input())
4 key=a[k-1]
5 a.sort()
6 for i in range(len(a)):
7     if key==a[i]:
8         print(i+1)
9         break

```

- Programming Assignment-2:  
Dictionary  
(/noc20\_cs35/progassig  
name=296)
- Programming Assignment-3:  
Functions  
(/noc20\_cs35/progassignment?  
name=297)
- Week 6  
Feedback  
(unit?  
unit=103&lesson=298)

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**Week 7**

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**Week 8**

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**Week 9**

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**Week 10**

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**Week 11**

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**Week 12**

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