Recursion 1

**Power Of A Number**

**Send Feedback**

Write a program to find x to the power n (i.e. x^n). Take x and n from the user. You need to print the answer.

**Note : For this question, you can assume that 0 raised to the power of 0 is 1**

**Input format :**

Two integers x and n (separated by space)

**Output Format :**

x^n (i.e. x raise to the power n)

**Constraints:**

0 <= x <= 8

0 <= n <= 9

**Sample Input 1 :**

3 4

**Sample Output 1 :**

81

**Sample Input 2 :**

2 5

**Sample Output 2 :**

32

**Predict The Output**

**Send Feedback**

What will be the output of following code?

def func(num):

return func(num-1)

num = 5

ans = func(num-1)

print(ans)

**Options**



5



Recursion Error



0



None Of The Above

Correct Answer

**Predict The Output**

**Send Feedback**

What will be the output of this code?

def printNumbers(n):

if(n<0):

return

print(n,end=" ")

printNumbers(n-2)

num = 5

printNumbers(num)

**Options**



Recursion Error



5 4 3 2 1



5 3 1



None of the above

Correct Answer

**Predict The Output**

**Send Feedback**

What will be the output of following code?

def fun(n):

if(n == 4):

return n

else:

return 2\*fun(n+1)

print(fun(2))

**Options**



4



8



16



Recursion Error

Correct Answer

**Sum Of Array**

**Send Feedback**

Given an array of length N, you need to find and return the sum of all elements of the array.

Do this recursively.

**Input Format :**

Line 1 : An Integer N i.e. size of array

Line 2 : N integers which are elements of the array, separated by spaces

**Output Format :**

Sum

**Constraints :**

1 <= N <= 10^3

**Sample Input 1 :**

3

9 8 9

**Sample Output 1 :**

26

**Sample Input 2 :**

3

4 2 1

**Sample Output 2 :**

7

**Check Number in Array**

**Send Feedback**

Given an array of length N and an integer x, you need to find if x is present in the array or not. Return true or false.

Do this recursively.

**Input Format :**

Line 1 : An Integer N i.e. size of array

Line 2 : N integers which are elements of the array, separated by spaces

Line 3 : Integer x

**Output Format :**

'true' or 'false'

**Constraints :**

1 <= N <= 10^3

**Sample Input 1 :**

3

9 8 10

8

**Sample Output 1 :**

true

**Sample Input 2 :**

3

9 8 10

2

**Sample Output 2 :**

Fal

se

**First Index of Number - Question**

**Send Feedback**

Given an array of length N and an integer x, you need to find and return the first index of integer x present in the array. Return -1 if it is not present in the array.

First index means, the index of first occurrence of x in the input array.

Do this recursively. Indexing in the array starts from 0.

**Input Format :**

Line 1 : An Integer N i.e. size of array

Line 2 : N integers which are elements of the array, separated by spaces

Line 3 : Integer x

**Output Format :**

first index or -1

**Constraints :**

1 <= N <= 10^3

**Sample Input :**

4

9 8 10 8

8

**Sample Output :**

1

**Last Index Of Number Question**

**Send Feedback**

Given an array of length N and an integer x, you need to find and return the last index of integer x present in the array. Return -1 if it is not present in the array.

Last index means - if x is present multiple times in the array, return the index at which x comes last in the array.

You should start traversing your array from 0, not from (N - 1).

Do this recursively. Indexing in the array starts from 0.

**Input Format :**

Line 1 : An Integer N i.e. size of array

Line 2 : N integers which are elements of the array, separated by spaces

Line 3 : Integer x

**Output Format :**

last index or -1

**Constraints :**

1 <= N <= 10^3

**Sample Input :**

4

9 8 10 8

8

**Sample Output :**

3