

Given an integer x, return true if x is a palindrome, and false otherwise.

Note: Don't convert the integer to string.

Example 1:

Input: x = 121

Output: true

Example 2:

Input: x = -121

Output: false

Example 3:

Input: x = 10

Output: false

To find Armstrong Number between two given number.

Example 1:

Input: start = 200, end = 500

Output: 370, 371, 407

Example 2:

Input: start = 1000, end = 2000

Output: 1634

Example 3:

Input: start = 1, end = 10

Output: 1, 2, 3, 4, 5, 6, 7, 8, 9

Given an integer num, repeatedly add all its digits until the result has only one digit, and return it. (use while loop only)

Example 1:

Input: num = 38

Output: 2

Explanation: The process is

38 --> 3 + 8 --> 11

11 --> 1 + 1 --> 2

Since 2 has only one digit, return it.

Example 2:

Input: num = 0

Output: 0

Finds the third-largest element present in the array.

Note: Don't use any sorting algorithms or build in sorting methods

Example 1 :

Input: arr[] = {12, 35, 1, 10, 34, 1}

Output: 12

Example 2:

Input: arr[] = {2, 2, 2}

Output: -1

Print the below pattern

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