**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Session: \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Programming I**

**Lab Exercise 12.8.2022**

**Problem Solving**

1. Create a function that takes in a date and returns the correct century.

Examples

century(1756) ➞ "18th century"

century(1555) ➞ "16th century"

century(1000) ➞ "10th century"

century(1001) ➞ "11th century"

century(2005) ➞ "21st century"

Notes

All dates will be between 1000 and 2010.

The 11th century is between 1001 and 1100.

The 18th century is between 1701-1800.

2. Create a function that takes a number as an argument and returns True or False depending on whether the number is symmetrical or not. A number is symmetrical when it is the same as its reverse.

Examples

is\_symmetrical(7227) ➞ True

is\_symmetrical(12567) ➞ False

is\_symmetrical(44444444) ➞ True

is\_symmetrical(9939) ➞ False

is\_symmetrical(1112111) ➞ True

3. A museum wants to get rid of some exhibitions. Katya, the interior architect, comes up with a plan to remove the most boring exhibitions. She gives them a rating, and removes the one with the lowest rating. Just as she finishes rating the exhibitions, she's called off to an important meeting. She asks you to write a program that tells her the ratings of the items after the lowest one is removed.

Create a function that takes a list of integers and removes the smallest value.

Examples

remove\_smallest([1, 2, 3, 4, 5] ) ➞ [2, 3, 4, 5]

remove\_smallest([5, 3, 2, 1, 4]) ➞ [5, 3, 2, 4]

remove\_smallest([2, 2, 1, 2, 1]) ➞ [2, 2, 2, 1]

Notes

Don't change the order of the left over items.

If you get an empty list, return an empty list: [] ➞ [].

If there are multiple items with the same value, remove item with lower index (3rd example).

4. An isogram is a word that has no repeating letters, consecutive or nonconsecutive. Create a function that takes a string and returns either True or False depending on whether or not it's an "isogram".

Examples

is\_isogram("Algorism") ➞ True

is\_isogram("PasSword") ➞ False # Not case sensitive.

is\_isogram("Consecutive") ➞ False

Notes

Ignore letter case (should not be case sensitive).

All test cases contain valid one word strings.