

1. Write a Python program to find the second smallest number in a list. #input #second\_smallest([1, 2, -8, -2, 0]) #output #-2

```
In [1]: def second_smallest(numbers):
        unique_numbers = set(numbers)
        sorted_numbers = sorted(unique_numbers)
        if len(sorted_numbers) < 2:
            return None
        return sorted_numbers[1]

# Test case
numbers_list = [1, 2, -8, -2, 0]
result = second_smallest(numbers_list)
print(result)
```

-2

1. Write a Python program to change a given string to a new string where the first and last chars have been exchanged

```
In [2]: def exchange_chars(string):
        if len(string) < 2:
            return string
        else:
            return string[-1] + string[1:-1] + string[0]

# Test case
input_string = "Hello"
new_string = exchange_chars(input_string)
print(new_string)
```

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1. Write a Python function that takes a list of words and returns the length of the longest one

```
In [6]: def longest_word_length(words):
        max_length = 0
        for word in words:
            if len(word) > max_length:
                max_length = len(word)
        return max_length

# Test case
word_list = ["apple", "banana", "cherry", "jackfruit", "eggplant"]
length = longest_word_length(word_list)
print(length)
```

9

1. Write a Python program to remove the nth index character from a nonempty string

```
In [4]: def remove_nth_character(string, n):
        if len(string) <= n:
            return string
        else:
            return string[:n] + string[n+1:]
```

```
input_string = "Hello"  
index_to_remove = 2  
new_string = remove_nth_character(input_string, index_to_remove)  
print(new_string)
```

Helo

1. Check if a given key already exists in a dictionary #input #d = {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}  
#is\_key\_present(5) #is\_key\_present(9) #output #Key is present in the dictionary  
#Key is not present in the dictionary

```
In [5]: def is_key_present(dictionary, key):  
        if key in dictionary:  
            print("Key is present in the dictionary")  
        else:  
            print("Key is not present in the dictionary")  
  
        # Test case  
dictionary = {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}  
is_key_present(dictionary, 5)  
is_key_present(dictionary, 9)
```

Key is present in the dictionary  
Key is not present in the dictionary