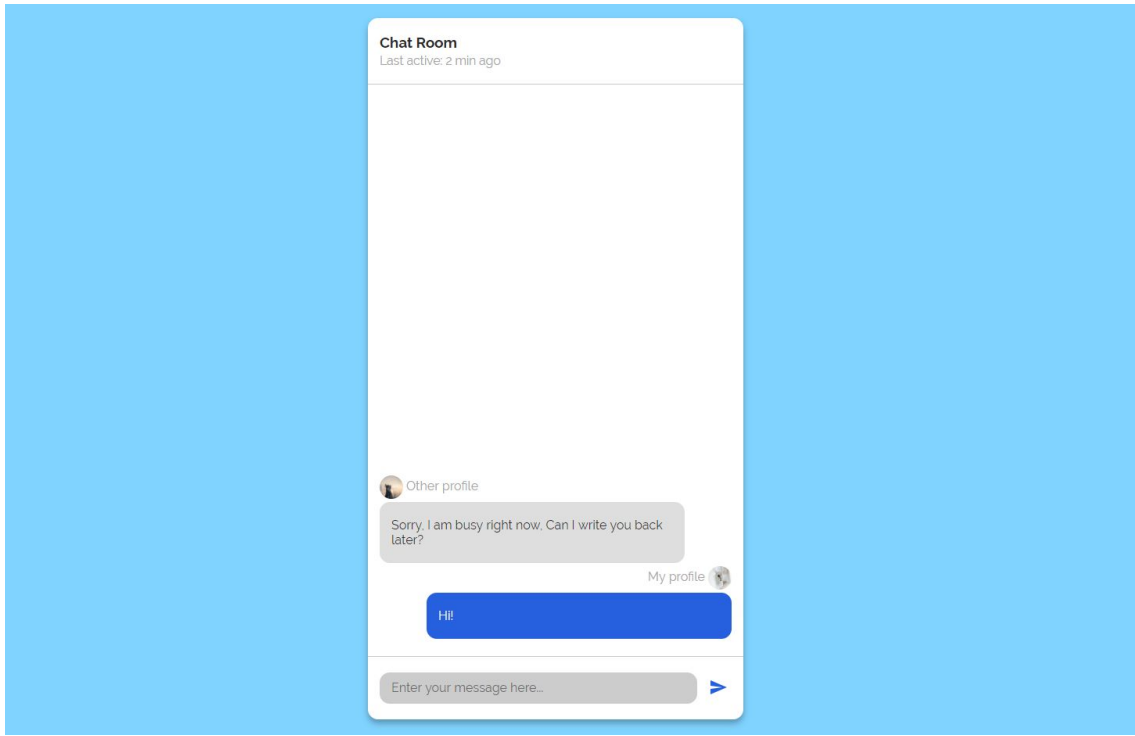


Exercises: DOM

1. Chat Room

Write a **function** to create the functionality of a **chat room**.

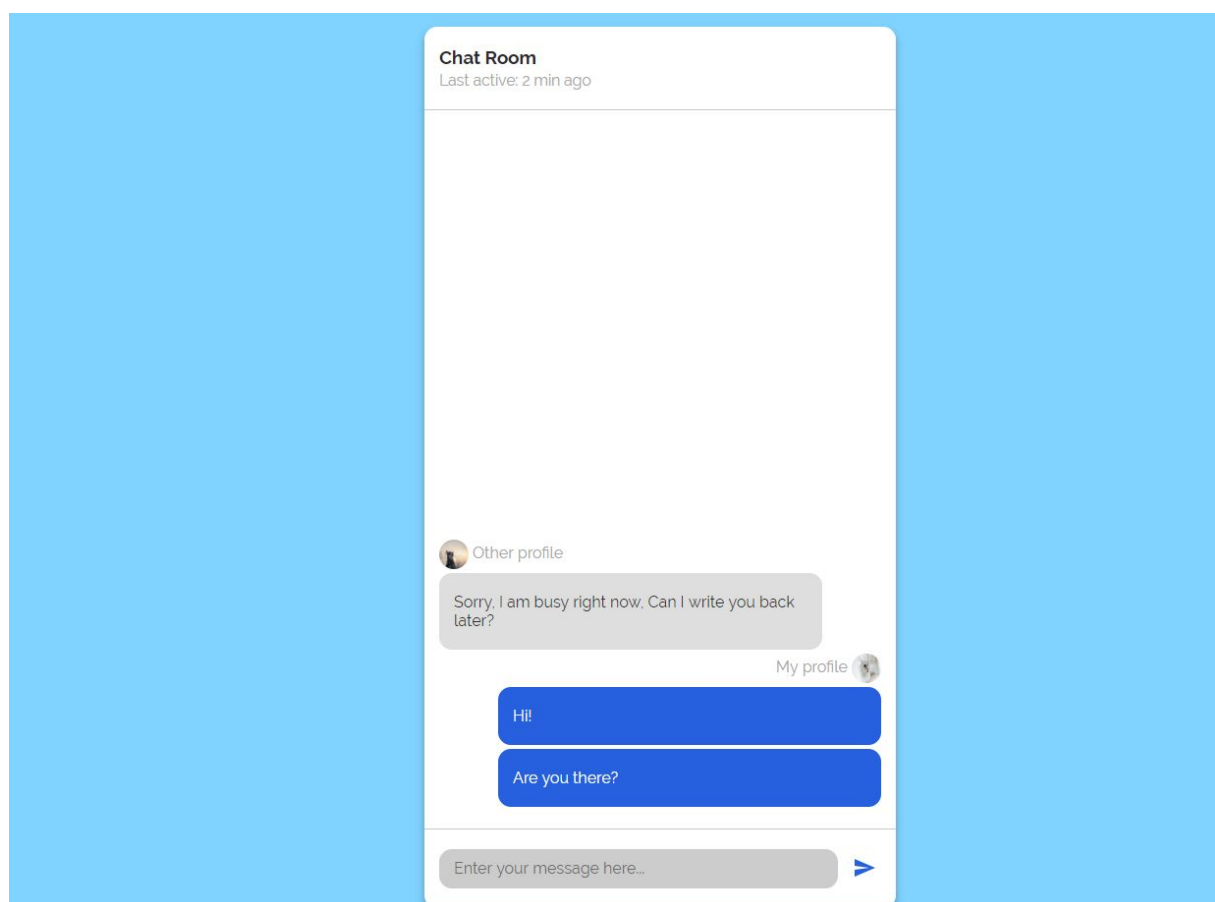
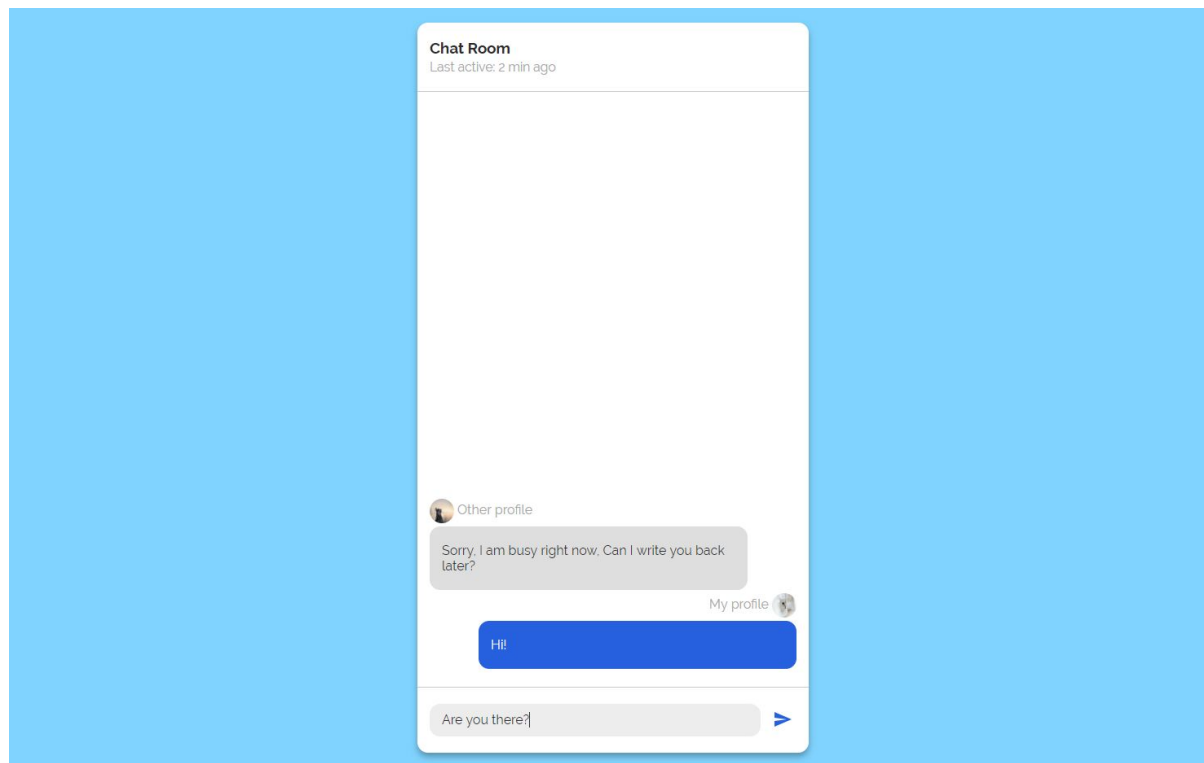


Note: Do not forget to add event listener to the send button!

The new **div** element with class **message my-message** should contain the current message that is about to be send.

The **current div** should be appended to the div with an **id="chat_messages"**.

The input should be cleared on each click of the send button.



What to submit?

Zip file containing the following:

- solution.js
- template.css
- template.html

File Name: GROWING-WORD.zip

2. Number Convertor

Write a function that **converts** a **decimal number** to **binary** and **hexadecimal**.

The form is contained within a light gray border. Inside, there's a white container with a 'Number' label and an input field. Below that is a 'From' label and a dropdown menu showing 'Decimal'. Next is a 'To' label and another dropdown menu. A 'CONVERT IT' button is positioned below the 'To' dropdown. At the bottom of the container is a 'Result' label and a wide, empty input field.

The given number will always be in **decimal format**. The "**From**" select menu will only have a **Decimal** option, but the "**To**" select menu will have **two options: Binary and Hexadecimal**.

This means that our program should have the functionality to **convert decimal to binary** and **decimal to hexadecimal**.

Note that "**To**" **select menu** by default is empty. You have to insert the two options (**'Binary'** and **'Hexadecimal'**) inside before continue. Also they should have **values ('binary' and 'hexadecimal')**.

- When the [**Convert it**] button is **clicked**, the expected result should appear in the [**Result**] input field.

Number

9

From

Decimal

To

Binary

CONVERT IT

Result

1001

Number

219

From

Decimal

To

Hexadecimal

CONVERT IT

Result

DB

What to submit?

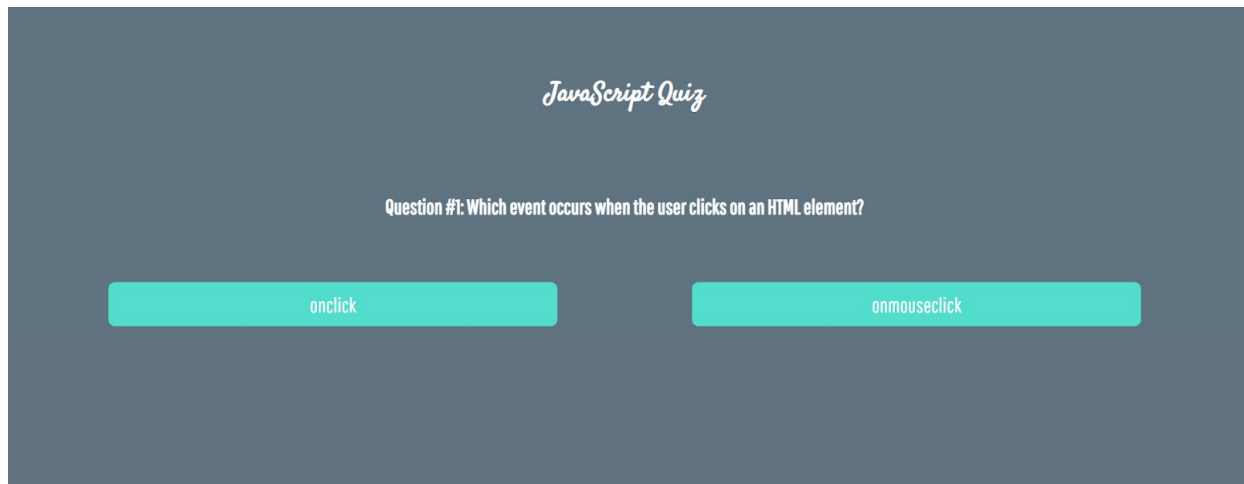
Zip file containing the following:

- solution.js
- template.css
- template.html

File Name: NUMBER-CONVERTER.zip

3. JavaScript Quiz

Write a function that has the functionality of a quiz.



There are three **sections** that contain **one question and 2 possible answers**.

The right answer is only one!

When one of the **list elements is clicked**, the next section **must appear (if any...)**.

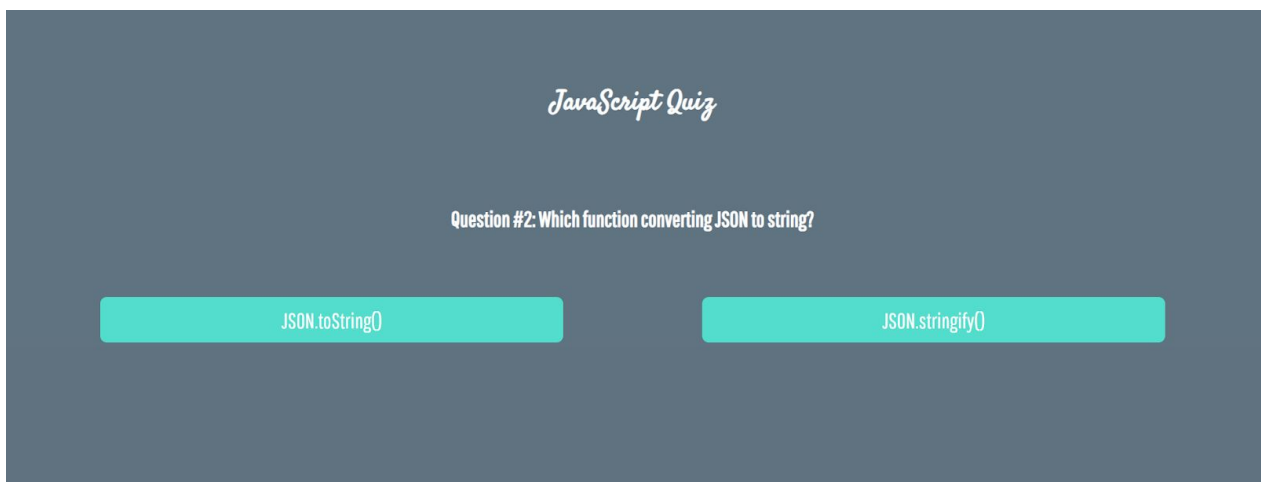
After all three questions have been answered, the **result div** must **appear**. (Use **'none'** and **'block'** to hide and show the question sections)

If all questions are answered correctly, you should print the following message:

"You are recognized as top JavaScript fan!"

Otherwise, just print **"You have {rightAnswers} right answers"**.

The right answers are (**onclick**, **JSON.stringify()** and **A programming API for HTML and XML documents**).



JavaScript Quiz

Question #3: What is DOM?

A programming API for HTML and XML documents

The DOM is your source HTML

JavaScript Quiz

You are recognized as top JavaScript fan!

What to submit?

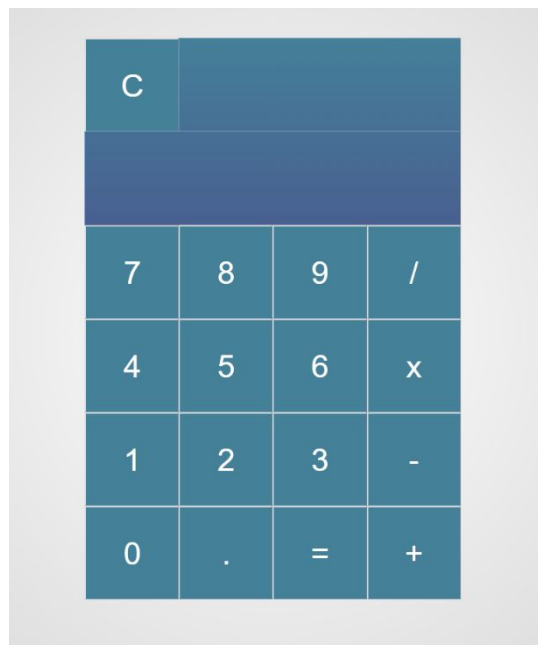
Zip file containing the following:

- solution.js
- template.css
- template.html

File Name: JAVASCRIPT-QUIZ.zip

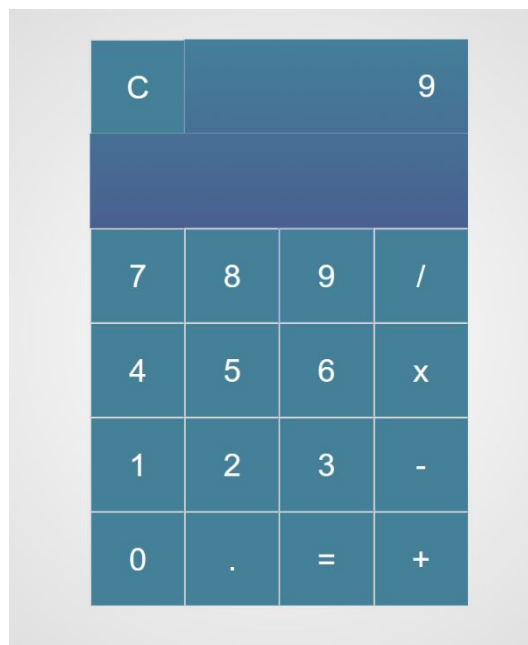
4. Numpad Calculator

Write a function that implements a calculator that has the following functionalities:

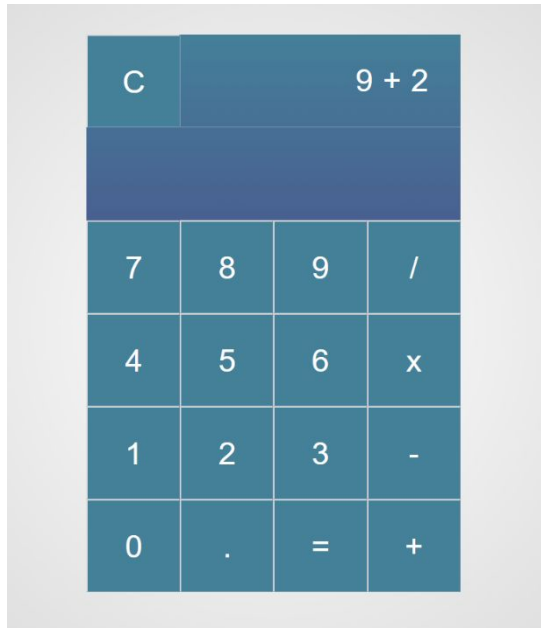


When one of **the buttons is clicked**, its **value** should be shown in the "**Expression**" field (**#expressionOutput**).

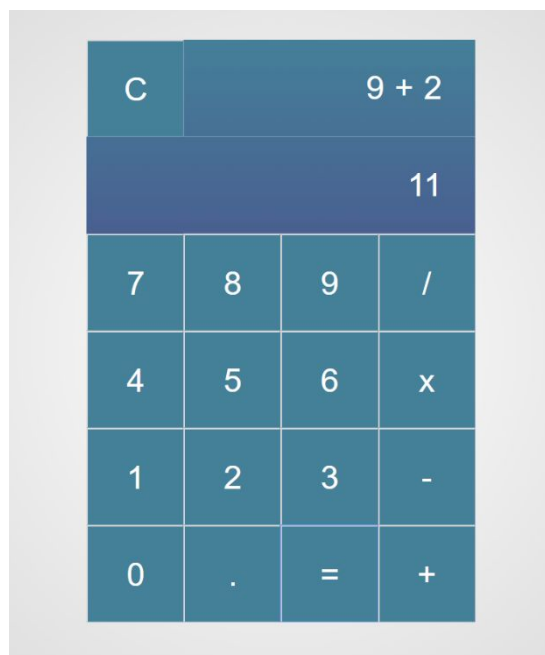
For instance, if we click on the button with value **9**, the expected result should be:



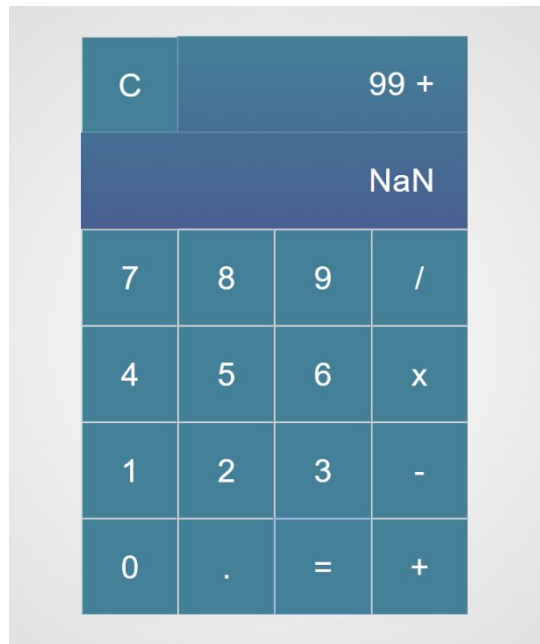
If the **current Expression** field (**#expressionOutput**) contains the whole math expression (**left operand**, **operator** and **right operand**: **Example: 9 + 2**), the expected result should be:



When the **equal sign "="** is pressed, the **result of that expression** should appear in the **Result** field (**#resultOutput**)

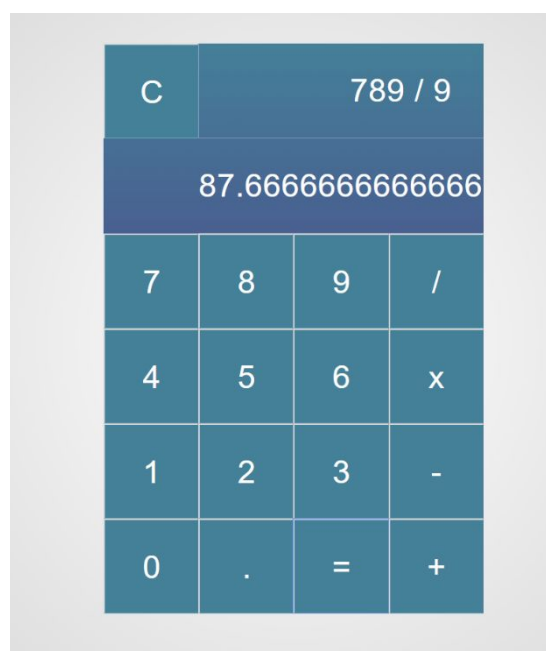


Otherwise, if we create an invalid expression such as **"99 +" (without second/right operand)** and we hit the equal sign "=", the expected result should be:

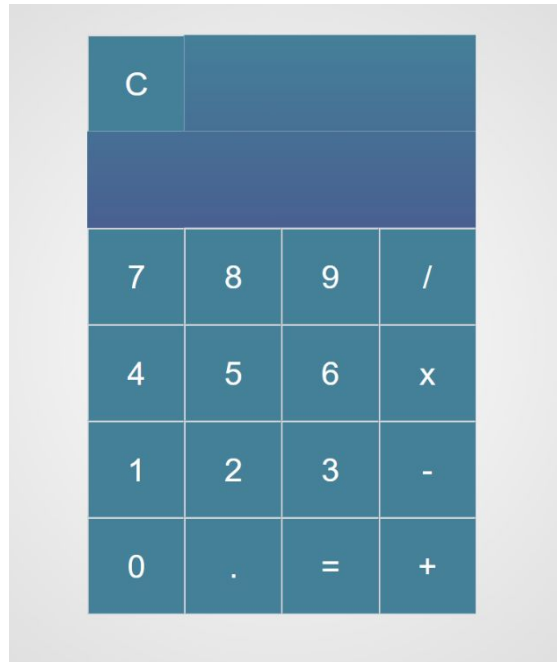


The "Clear" button should **clear both Expression and Result fields (#expressionOutput and #resultOutput)**

For instance, if we have the following expression:



And we press "Clear", the expected result should be:



What to submit?

Zip file containing the following:

- solution.js
- template.css
- template.html

File Name: NUMPAD-CALCULATOR.zip

5. Order the Names

Write a **function** that orders names alphabetically.

ADD

Kingsland Database

A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	
M	
N	Noon
O	
P	Peterson
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	

For instance, if we register **David**, his name should appear in the **D** column.

ADD

Kingsland Database

David

Nixon

Peterson



KINGSLAND
UNIVERSITY

ADD

Kingsland Database

A	
B	
C	
D	David, Drake, Dino
E	
F	
G	
H	
I	
J	
K	
L	
M	
N	Nixon
O	
P	Peterson
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	

What to submit?

Zip file containing the following:

- solution.js
- template.css
- template.html

File Name: ORDER-THE-NAMES.zip