bug1:

bug description:

This system cannot treat negative number correctly.

As a negative number is also integer, the backend side cannot analysis it correctly.

The front end freeze as the backend is error status code 500.

bug shot:

The greatest factorial calculator!



6	<u>(index):65</u>
Hello! I am in the done part of the ajax call	<u>(index):80</u>
▶ {answer: 720}	<u>(index):81</u>
-6	<u>(index):65</u>
▶ POST <u>https://qainterview.pythonanywhere.com/fa</u> <u>jquery-1</u> <u>ctorial</u> 500 (INTERNAL SERVER ERROR)	L.12.4.js:10254
>	

How to reproduce:

Just input any negative integer, like -6 or -4.

Reason estimation& fix suggestions:

The backend API functions only consider positive integer and 0 case but forgot negative number cases. Thus the API function cannot provide response and the front end freeze.

bug2:

bug description:

This system cannot handle large numbers. After testing, I find when the integer larger or equal than 990, the front end freeze because of internal error code 500 on console.

bug shot:

The greatest factorial calculator!



The factorial of 989 is: Infinity

	989	<u>(index):65</u>	
	Hello! I am in the done part of the ajax call	<u>(index):80</u>	
	▶ {answer: Infinity}	<u>(index):81</u>	
	990	<u>(index):65</u>	
8	▶ POST <u>https://qainterview.pythonanywhere.com/fa</u> <u>jquery-1.12.4.js:10254</u> <u>ctorial</u> 500 (INTERNAL SERVER ERROR)		

How to reproduce:

Just input any integer large or equal than 990, and check result

Reason estimation& fix suggestions:

The backend API cannot digest large numbers. I believe that is because of number overflows or exceed memory during calculations. I suggest add a check to find if the integer is large than 170. As for number large than 170, they are all infinity, which will reduce lots of memory cost.