/\*\*

\* The following is the function where the solution shall be written

\*/

function solution (input) {

input = input.replace(/[A-Z]/g, "").replace(/ /g,'') //Removes all letters and whitespace

input = input.split('').filter(function(item, pos, self) {

return self.indexOf(item) == pos;

}).join(''); //Extra code to remove duplicate numbers.

let output = []

for (let i = 0; i < input.length; i++) {

let newStr = input.charAt(i)

for (let j = 0; j < input.length; j++) {

if (input.charAt(i) === input.charAt(j)) continue

newStr += input.charAt(j)

}

output.push(newStr)

}

if (input.length > 2) { //Doesn't need to do this section if the input length is <=2

for (let i = input.length -1; i > -1; i--) {

let newStr = input.charAt(i)

for (let j = input.length; j > -1; j--) {

if (input.charAt(i) === input.charAt(j)) continue

newStr += input.charAt(j)

}

output.push(newStr)

}

}

return output = output.sort(function(a, b){return b-a}).join() //Sorted output by descending

}

console.log(solution('632')); // expected output 632,623,362,326,263,236

console.log(solution('A 3B2 C6D')); // expected output 632,623,362,326,263,236

console.log(solution('666')); // expected 6

console.log(solution('6688')); // expected output 86,68