1] Given a set of numbers like <10, 36, 54,89,12> we want to find sum of weights based on the
following conditions
1. 5 if a perfect square
2. 4 if multiple of 4 and divisible by 6
3. 3 if even number
And sort the numbers based on the weight and print it as follows
<10,its_weight>,<36,its weight><89,its weight>
Should display the numbers based on increasing order.
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2]Save the string "WELCOMETOZOHOCORPORATION" in a two dimensional array and search
for substring like "too" in the two dimensional string both from left to right and from top to bottom.
w e L C O
M E T O Z
O H O C O
R P O R A
T I O n
And print the start and ending index as
Start index : <1,2>
End index: <3, 2>
****

3] Alternate sorting: Given an array of integers, rearrange the array in such a way that the first
element is first maximum and second element is first minimum.
Eg.) Input : {1, 2, 3, 4, 5, 6, 7}
Output : {7, 1, 6, 2, 5, 3, 4}
****

4]Remove unbalanced parentheses in a given expression.
Eg.) Input : ((abc)((de))

Output : ((abc)(de))
Input : (((ab)
Output : (ab)
****

5] Print all distinct permutations of a string having duplicates.
Input : ABCA
Output : AABC AACB ABAC ABCA ACBA
ACAB BAAC BACA BCAA CABA
CAAB CBAA
****

6] Given two dimensional matrix of integer and print the rectangle can be formed using given indices and also find the sum of the elements in the rectangle
Input: mat[M][N] = {{1, 2, 3, 4, 6}, {5, 3, 8, 1, 2}, {4, 6, 7, 5, 5}, {2, 4, 8, 9, 4} };
index = (2, 0) and (3, 4)
Output: Rectangle
4 6 7 5 5
2 4 8 9 4
sum 54
****