**Contiguous Subarrays**

A contiguous subarray, also known as a contiguous subsequence, is a subset of elements from an array that are adjacent and have no gaps in between. In other words, the elements of a contiguous subarray are positioned consecutively in the original array.

For example, consider the array:

csharp

[1, 2, -3, 4, -1, 2, 1, -5, 4]

The contiguous subarrays include:

* [1]
* [1, 2]
* [-3, 4]
* [4, -1, 2, 1]
* [-5, 4]

A common use of contiguous subarrays is in algorithms and problems related to finding the maximum sum subarray, where the goal is to find a subarray with the largest sum of its elements.

class Solution {

// arr: input array

// n: size of array

// Function to find the sum of contiguous subarray with maximum sum.

long maxSubarraySum(int arr[], int n) {

// Your code here

long currentMax = 0;

long globalMax = Long.MIN\_VALUE;

for (int i = 0; i < n; i++) {

currentMax = Math.max(currentMax + arr[i], arr[i]);

globalMax = Math.max(currentMax, globalMax);

}

return globalMax;

}

}