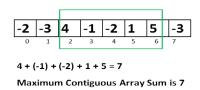
Lab Exercise 2 | Week 3

Implement the maximum- subarray problem.

- **a.** Input: Array of integers.
- **b.** Output: Maximum contiguous subarray sum.

Implement with

- a. Brute Force Solution: Solving it for every possible subarray.
- b. Divide and Conquer:
 - **a.** Divide the given array in two halves.
 - **b.** Return the maximum of following three
 - i. Maximum subarray sum in left half (Make a recursive call)
 - **ii.** Maximum subarray sum in right half (Make a recursive call)
 - **iii.** Maximum subarray sum such that the subarray crosses the midpoint.
- **c.** Example:



Write the analysis in detail and conclude.