CS 325

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Group Assignment 1 Project Report

Pseudocode:

Algorithm 1

A = [a1, a2, … , an]

Max subarray(A):

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

for(int j = i; j < n; j++)

sum = sum + a[j];

if(max < sum)

max = sum;

Algorithm 2

A = [a1, a2, … , an]

Int sum, max;

Max subarray(A):

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

sum = sum + a[i];

if(max < sum)

max = sum;

for(i = 0; i < n-1; i++)

sum = sum - a[i];

if(max < sum)

max = sum;

Algorithm 3

A = [a1,a2, … , an]

Dynamic(A, Start, End):

If((end-start < 1)

Return A[Start – 1]

Else

Return 0

Int middle = ((End – Start + 1) / 2) + Start

Return max{ Dynamic(A, Start, middle – 1),

Dynamic(A, middle + 1, End),

MaxMid(A, Start, middle, End)}