Array = [ -2 , 1 , -3 , 4 , -1 , 2 , 1 , -5 , 4 , 10 ]

Find the maximum subarray = [4,-1,2,1,-5,4,10]

Algo

arr[0]=sum[0]=temp[0]

for (int i = 1 ; i<length(arr);i++ ){

If (sum[i-1]+arr[i]<arr[i]){

sum[i]=arr[i];

maxsum[i]=max{maxsum[i-1],sum[i]};

}

else{

sum[i] = sum[i-1]+arr[i];

maxsum[i]=max{maxsum[i-1],sum[i]};

}

}

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| arr[i] | -2 | 1 | -3 | 4 | -1 | 2 | 1 | -5 | 4 | 10 |
| sum[i] | -2 | 1 | -2 | 4 | 3 | 5 | 6 | 1 | 5 | 15 |
| sum[i-1]  +arr[i] | -2 | -1 | -2 | 2 | 3 | 5 | 6 | 1 | 5 | 15 |
| maxsum[i] | -2 | 1 | 1 | 4 | 4 | 5 | 6 | 6 | 6 | 15 |

