Assignment 3

Question 1

Group no 27

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Algorithm

The maximum circular sum array can either be

- A subarray entirely contained inside the bounds of the array without looping over or
- A subarray looping over the ends in which case its complimented array will be entirely contained in the array without looping. This compliment array has the sum = total_sum-max_sum. Which will give us the minimum sum subarray.

We use these observations to find two things max sum subarray and min sum subarray in just one sweep of the array. The answer for max sum circular array is then **max(max_sum_subarray, totalsum − min_sum_subarray)**

Samp[le Input format:

```
Console                                                    —   □   ✕

Input a non negative number:7
Enter the array:
Enter the number at index 0 : 8
Enter the number at index 1 : -8
Enter the number at index 2 : 9
Enter the number at index 3 : -9
Enter the number at index 4 : 10
Enter the number at index 5 : -11
Enter the number at index 6 : 12
Final Max Circular Array Sum: 22
```