Assignment 10

Computer Systems Lab

Assignment Date: November 26, 2020 **Date of Submission**: November 26, 2020

A professional robber is planning to rob houses along a street. Each house has a certain amount of money stashed. All houses at this place are arranged in a circle. That means the first house is the neighbor of the last one. Meanwhile, adjacent houses have a security system connected, and it will automatically contact the police if two adjacent houses were broken into on the same night.

Given a list of n non-negative integers A representing the amount of money of each house, return the maximum amount of money you can rob tonight without alerting the police.

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Example 1:

Input: n = 3 A[] = {4,3,4}
Output: 4

Example 2:

Input: n = 4 A[] = {1,2,3,1}
Output: 4


Example 3:

Input: n = 1 A[] = {0}
Output: 0

Example 4:

Input: n = 5 A[] = {1, 2, 4, 3, 5}
Output: 9

Example 5:

Input: n = 6 A[] = {8, 2, 1, 9, 5, 4}
Output: 17
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Submission Instruction:

File Name: A10_RollNo.c/cpp
Email to: *joy@iitbbs.ac.in* with **subject line**: A10_RollNo