

8593 - LAB 06

Instructions

1. Access the auto-grader at <https://c200.luddy.indiana.edu>
2. Please write the code for the problems in python language
3. The code should be readable with variables named meaningfully
4. Plagiarism is unacceptable and we have ways to find it, so do not do it
5. Don't change the function signature (name of the function and number and types of arguments) provided in this file.
6. Once you pass all the tests on the auto grader, show your work to the teaching assistant

Problem

Question

Lila is on a treasure hunt in a row of houses. Each house contains a certain amount of treasure, but there's a twist—robbing two adjacent houses will trigger an alarm, and the authorities will catch Lila. The goal is to find the maximum amount of treasure Lila can steal without getting caught.

You are given a list `treasure_houses`, where `treasure_houses[i]` represents the amount of treasure in house index "i" and she starts robbing from `current_house`, and goes down the row. Remember, She cannot rob adjacent houses without calling the cops on herself.

Given this information, Write a function to find the maximum amount of treasure Lila can steal.

Test cases

1. Input: `max_treasure([20, 12, 15, 30, 16], 1)`
Output: 42
Explanation: Lila robs index 1, treasure = 12. She cannot rob 20 or 15.
This Leaves her with 30 and 16 as options. Thus, She robs 30 to maximize her loot,
giving output = 30 + 12 = 42

Function signature

```
def max_treasure(treasure_houses, current_house):  
    ***your logic***  
    return total_loot
```