Maximum Number of coins

We have been given N balloons, each with a number of coins associated with it. On bursting a balloon i, the number of coins gained is equal to A[i-1]*A[i]*A[i+1]. Also, balloons i-1 and i+1 now become adjacent. Find the maximum possible profit earned after bursting all the balloons. Assume an extra 1 at each boundary.

Example 1:

```
Input:
N=2
a[]={5, 10}
Output:
60
Explanation: First Burst 5, Coins = 1*5*10
              Then burst 10, Coins+= 1*10*1
              Total = 60
```

Example 2:

```
Input:
N=4
a[] = {3,1,5,8}
Output:
167
Explanation:
nums = [3,1,5,8] --> [3,5,8] --> [3,8] --> [8] --> []
coins =  3*1*5    +   3*5*8   +  1*3*8  + 1*8*1 = 167.
```

Your Task:

You don't need to read input or print anything. Your task is to complete the function **maxCoins()** which takes the array arr[], its size N, and returns the maximum number of coins that can be collected.

Expected Time Complexity: O(N^3)
Expected Space Complexity: O(N^2)

Constraints:
1 <= N <= 400
0 <= a[i] <= 100