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Started on	Tuesday, 22 October 2024, 1:55 PM
State	Finished
Completed on	Tuesday, 22 October 2024, 2:34 PM
Time taken	39 mins 34 secs
Grade	10.00 out of 10.00 (100%)

Question 1

Correct

Mark 10.00 out of 10.00

Playing with Numbers:

Ram and Sita are playing with numbers by giving puzzles to each other. Now it was Ram term, so he gave Sita a positive integer 'n' and two numbers 1 and 3. He asked her to find the possible ways by which the number n can be represented using 1 and 3. Write any efficient algorithm to find the possible ways.

Example 1:**Input:** 6**Output:** 6**Explanation:** There are 6 ways to 6 represent number with 1 and 3

1+1+1+1+1+1

3+3

1+1+1+3

1+1+3+1

1+3+1+1

3+1+1+1

Input Format

First Line contains the number n

Output Format**Print: The number of possible ways 'n' can be represented using 1 and 3**

Sample Input

6

Sample Output

6

Answer: (penalty regime: 0 %)

```

1  #include <stdio.h>
2  #define MAX 1000
3  int main() {
4      int n;
5      long long a[MAX] = {0};
6      scanf("%d", &n);
7      a[0] = 1;
8      for (int i = 1; i <= n; i++) {
9          if (i >= 3) a[i] += a[i - 3];
10         if (i >= 1) a[i] += a[i - 1];
11     }
12     printf("%lld\n", a[n]);
13     return 0;
14 }
```

	Input	Expected	Got	
✓	6	6	6	✓
✓	25	8641	8641	✓

	Input	Expected	Got	
✓	100	24382819596721629	24382819596721629	✓

Passed all tests! ✓

Correct

Marks for this submission: 10.00/10.00.

◀ 5-Implementation of Quick Sort

Jump to...

2-DP-Playing with chessboard ▶