```
Tiling in C++
#include <iostream>
                                                            Function
                                                                         Returns
                                                                                            Reason
using namespace std;
                                                              Call
                                                                                    tilingways(3) +
                                                         tilingways(4)
int tilingways(int n) {
                                                                                    tilingways(2)
  if (n == 0) {
                                                                                    tilingways(2) +
                                                         tilingways(3)
    return 0;
                                                                                    tilingways(1)
                                                                                    tilingways(1) +
  if (n == 1) {
                                                         tilingways(2)
                                                                                    tilingways(0)
    return 1;
                                                                        1
                                                                                    Base case
                                                         tilingways(1)
  }
                                                                                    Wrong base case — it
  return tilingways(n - 1) + tilingways(n - 2);
                                                         tilingways(0)
                                                                        0 X
                                                                                    should be 1
}
                                                         tilingways(2)
                                                                        1 + 0 = 1
int main() {
                                                                                    Base case
                                                         tilingways(1)
                                                                        1
  cout << tilingways(4) << endl;</pre>
                                                                        1 + 1 = 2
                                                         tilingways(3)
  return 0;
                                                         tilingways(2)
                                                                                    Already computed
                                                                        1
                                                                        2 + 1 = 3
                                                         tilingways(4)
Output:-
```