Recursive tree of LightOJ Monkey Banana Problem

```
maxBanana(0, 0, 4, arr)
                                                                                                                    = 63
                                                                                      maxBanana(1, 0, 4, arr)
                                                                                                                                   maxBanana(1, 1, 4, arr)
                                                                                                = 53
                                                                                                                                            = 56
                                                                maxBanana(2, 0, 4, arr)
                                                                                                 maxBanana(2, 1, 4, arr)
                                                                                                                           maxBanana(2, 1, 4, arr)
                                                                                                                                                        maxBanana(2, 2, 4, arr)
                                                                         = 40
                                                                                                          = 47
                                                                                                                                  = 47
                                                                                                                                                                 = 52
                                         maxBanana(3, 0, 4, arr)
                                                                     maxBanana(3, 1, 4, arr)
                                                                                               maxBanana(3, 1, 4, arr) maxBanana(3, 2, 4, arr)
                                                                                                                                                   maxBanana(3, 2, 4, arr)
                                                                                                                                                                             maxBanana(3, 3, 4, arr)
                                                 = 29
                                                                                                      = 38
                                                                              = 38
                                                                                                                                                           = 42
                                                                                                                                                                                      = 21
                                                                    maxBanana(4, 1, 4, arr) maxBanana(4, 0, 4, arr) maxBanana(4, 2, 4, arr)
                                                                                                                                              maxBanana(4, 1, 4, arr)
                                          maxBanana(4, -1, 4, arr)
                                                                                                                                                                        maxBanana(4, 3, 4, arr)
                                                                                                                                                                                                 maxBanana(4, 2, 4, arr)
                  maxBanana(4, 0, 4, arr)
                          = 20
                                                    = 0
                                                                            = 30
                                                                                                     = 20
                                                                                                                                                      = 30
                                                                                                                                                                                                         = 19
            maxBanana(5, 0, 4, arr)
                                     maxBanana(5, -1, 4, arr) maxBanana(5, 1, 4, arr)
                                                                                        maxBanana(5, 0, 4, arr)
                                                                                                                  maxBanana(5, 2, 4, arr)
                                                                                                                                            maxBanana(5, 1, 4, arr)
                                                                                                                                                                     maxBanana(5, 3, 4, arr)
                                                                                                                                                                                              maxBanana(5, 2, 4, arr)
                     = 18
                                               = 0
                                                                       = 12
                                                                                                = 18
                                                                                                                         = 0
                                                                                                                                                  = 12
                                                                                                                                                                             = 0
                                                                                                                                                                                                    = 0
                                                         maxBanana(6, 1, 4, arr)
                                                                                                                                                               maxBanana(6, 3, 4, arr)
                                                                                                                                                                                         maxBanana(6, 2, 4, arr)
      maxBanana(6, 0, 4, arr)
                               maxBanana(6, -1, 4, arr)
                                                                                   maxBanana(6, 0, 4, arr)
                                                                                                            maxBanana(6, 2, 4, arr)
                                                                                                                                      maxBanana(6, 1, 4, arr)
               = 10
                                         = 0
                                                                                          = 10
                                                                                                                   = 0
                                                                                                                                             = 0
                                                                                                                                                                         = 0
                                                                                                                                                                                                = 0
maxBanana(7, 0, 4, arr)
                       maxBanana(7, -1, 4, arr)
                                                   maxBanana(7, 1, 4, arr)
                                                                            maxBanana(7, 0, 4, arr) maxBanana(7, 2, 4, arr) maxBanana(7, 1, 4, arr) maxBanana(7, 3, 4, arr) maxBanana(7, 2, 4, arr)
                                                            = 0
                                                                                      = 0
         = 0
                                 = 0
                                                                                                               = 0
                                                                                                                                        = 0
                                                                                                                                                                                           = 0
```

Note: Black color indicates recursive calls

Magenta color indicates results obtained from recursive call Blue color indicates results obtained from memoization Red berry color indicates results obtained from corner cases.

The recursive function is:

```
long long maxBanana(int row, int col, int n, const vector<vector<int>>& arr)
{
    if (row == 2 * n - 1)
        [corner case]
        return 0;
```