Does the code below correctly compute all c[m] = C(n, m) for a fixed n? What tricks are used here to increase the efficiency compared to the code given in the class (not using the recursive equation)? What is #(arithmetic and assignment operations in lines 4, 6, 7 for all iterations)?

```
1.    int[] c = new int[n+1];
2.    c[0] = 1;
3.    for (int m = 1; m <= n; m++)
4.    {    int top = n, bottom = m;  //top = n cannot be taken out of m-loop
5.         for (int i = 1; i < m; i++)
6.              {  top *= (n - i); bottom *= i; }
7.         c[m] = top/bottom;
8.    }
```