Implement pow(x, n) % M.
In other words, given x, n and M, find (xn) % M.

Example 1:

Input:
x = 3, n = 2, m = 4
Output:
1
Explanation:
32 = 9. 9 % 4 = 1.

```
class Solution
{
    public:
        long long int PowMod(long long int x,long long
int n,long long int M)
        {
            long long int ans = 1;

            while(n > 0){
                if(n & 1){
                    // odd
                    ans = (ans * x) % M;
                }
                x = (x * x) % M;
                n = n >> 1;
            }
            return ans % M;
        }
};
```