In order of hardness (from easiest to hardest):

Problem B:

Author: Md Mahbubul Hasan, **Alternate:** Shiplu Hawlader
Simple one. One way to do it is to check if: a >= b + c + d, b >= a + c + d and 2 more logics. But this one is "a bit" tiresome to code, so you can do it like: s = a + b + c + d and check, a >= s – a, b >= s – b and so on. And those who are quick in head can also do: 2*a >= s :P

Problem D:

Author: Md Mahbubul Hasan, **Alternate:** Derek Kisman
First sort R, B and G. Then try to give B – R to R. Then G – B to both B and R. And finally distribute the rest of W to all R, B and G. However, you can simulate the process also as R, B, G, W has so low limit. If R, B and G are non zero you take min(R, B, G). And if any of them zero then transfer one W to that color.

Problem F:

Author: Md Mahbubul Hasan, **Alternate:** Derek Kisman
You have to notice the pattern. Intentionally I skipped giving the string of n = 3. If you are interested give it a search with Dragon Curve.

Problem H:

Author: Shiplu Hawlader, Alternate: Md Mahbubul Hasan
Within only 64 products we know we will get 32 zeroes (actually less). So it is sufficient to loop until the answer is zero or it is n.

Problem A:

Author: Hedayet, **Alternate:** Hasnain Heickal
Bitmask DP. The limit is kept low intentionally so that two bitmap of 2^n size dp also passes. However, you can do it in 3^n state DP.

Problem C:

Author: Monirul Hasan, **Alternate:** Tasnim Imran Sunny
Union find with hashing / stl MAP. You can also use BFS/DFS.

Problem E:

Author: Jane Alam Jan, **Alternate:** Hasnain Heickal
Number Theory. First see that, n^2 = n (mod m) so, (n – 1)n = 0 (mod m). So n is multiple of divisor of m. However, (n – 1) and n are coprime. So what you have to do is, factorize m. Then some primes of m with the same power will be divisor of n (and others will be of n – 1). So it will be something like: px = n, q(m/x) = n – 1. From here you can derive 2 variable diaphontine equation that can be solved with extended gcd.

Problem G:

Author: Hasnain Heickal, **Alternate:** Shiplu Hawlader, **Precision Check in python:** Md Mahbubul Hasan
Known as Secretary Problem. Give it a search :)