```
 ?- factorial(2, X).

1. fail   2. factorial(1, X1), X is 2 * X1

          3. fail   4. factorial(0, X2), X1 is 1 * X2, X is 2 * X1

                    X2 = 1

              5. X1 is 1 * 1, X is 2 * X1      PRUNED

                    X1 = 1

              6. X is 2 * 1

              7. X = 2
```