# Expanding the exponent in the form of -ary (Iterative Approach)

n (exponent) can be written as sum of .

1. g:- 11 can be written as 

If we have to find out , then it can be written as .

This is same as .

We have to multiply those powers only in which (exp%2!=0) to get the result.

In each iteration exp is reduced by factor of 2. And base will square itself.

The above condition will run in loop till exponent becomes 0….

You can find code on Coding Blocks IDE :

<https://ide.codingblocks.com/s/122885>