N^{th} Root of a Number using Binary Search –

→ Problem Statement –:

→ Given N and M

To find N^{th} root of M

$x^n = M$ (return -1 if $x \neq$ integer)

(Brute Force) Using Linear Search –

→ From the problem it is clear –

x is a integer such that – $1 \leq x \leq M$

We are to perform linear search in this range –
and check $func(x, N) = M$

Algorithm –

(1) We first run a loop (say i) from 1 to m.

(2) if $func(x, N) == M$
we return x

if $func(x, N) > M$
the no is bigger than our range
break out and return -1