int NOD ( int n ) {

int sqrtn = sqrt ( n );

int res = 1;

for ( int i = 0; i < prime.size() && prime[i] <= sqrtn; i++ ) {

if ( n % prime[i] == 0 ) {

int p = 0; /\*Counter for power of prime\*/

while ( n % prime[i] == 0 ) {

n /= prime[i];

p++;

}

sqrtn = sqrt ( n );

p++;/\*Increase it by one at end\*/

res \*= p; /\*Multiply with answer\*/

}

}

if ( n != 1 ) {

res \*= 2; /\*Remaining prime has power p^1. So multiply with 2\*/

}

return res;

}