Maths Lecture DSA

Prime Nos :-
(Number that is divisible by 1 and itself is a prime number)

2, 3, 5, 7, 13, ------

To find 13 :-

~~1~~, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, ~~13~~

from the above table check if any number is dividing 13 & the remainder is zero.

```
for (int i = 2; i < n; i++)
{
    if (n % i == 0)
        Not prime
}
Prime
```

Another example :-

1	36
2	18
3	12
4	9
6	6
9	4
12	3
18	2
36	1

Hence, only make checks for numbers ≤ sqrt(N)

Repeating hence ignore

Q

N = 40

0 → True

X → False

2 3 4 5 6 7 8 9 10

11 12 13 14 15 16 17 18 19 20

21 22 23 24 25 26 27 28 29 30

31 32 33 34 35 36 37 38 39 40