

### Algorithm:

Step 1: Generate a list of consecutive integers starting from 2 to  $n$ .

Step 2: Initially, let  $p=2$ . We have considered that first prime number 2 is  $p$ .

Step 3: Starting from  $p^2$ , count up in increments of  $p$  and mark each of these numbers greater than or equal to  $p^2$  itself in the list. These numbers will be  $p(p+1), p(p+2), p(p+3)$

Step 4: Find the first number greater than  $p$  in the list that not marked. If there was no such number, stop. Otherwise let  $p$  now equal this number (which is next to prime) and repeat from step 3.

### Pseudocode:

1. Create a Scanner object named "scnr"
2. Prompt the user to enter the number and  
Store the input in a variable.
3. while (count < n)
4. For i = 2 to n
  - if i is equal to 0 then break
  - if i is equal to number continue count
5. End for
6. Close the scanner object
7. End.

Contribution to Lap report:

Algorithm:

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Time spent: 30 min.

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