$n = a^x b^y c^z$, where a, b and c are prime factors of n and x, y, z are their powers then the total no. of factors of n

$= (x+1)(y+1)(z+1)$

For n! , you find all prime nos till n and then use the following trick. To find power of two in 100!

$100/2 = 50$

$50/2 = 25$

$25/2 = 12$

$12/2 = 6$

$6/2 = 3$

$3/2 = 1$

$50 + 25 + 12 + 6 + 3 + 1 = 97$

So in 100! the power of 2 is 2^{97}.

use this and find the powers of all numbers that are prime and also $\boxed{2 < 100}$.

then multiply all those powers after incrementing by one.