Prime Factorization

ZPRAC-16-17-Lab7

[20 Points]
Prime Factorization

ANNOUNCEMENT: Up to 20% marks will be allotted for good programming practice. These include
- Comments for non trivial code
- Indentation: align your code properly
- Use of Functions : Complete the provided code to perform the given task. Fill the function primeFactors().

Implement the following procedure to find print the prime factors of a number in increasing order
1) While n is divisible by 2, print 2 and divide n by 2.
2) After step 1, n must be odd. Now start a loop from i = 3 to square root of n (Why?). While i divides n,
divide n by i and print i, increment i and continue.
3) If n is a prime number and is greater than 2, then n will not become 1 by above two steps. So
print n if it is greater than 2.

Output its prime factors in increasing order

Input : An integer
Output : A prime factors in increasing order with a newline after every factor

Example:

Input:
725
Output:
5
29

Input:
52

Output:
2
13

Constraint :
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2 <= n <= 100000