Project Euler: Problem 3

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Problem (Largest Prime Factor)**.** The prime factors of 13195 are 5, 7, 13, and 29. What is the largest prime factor of the number 600851475143?

Solution. The problem merely deals with taking any given integer N and breaking it down into its prime factorization:

$$N = p_1^{m_1} p_2^{m_2} \dots p_k^{m_k}$$

where the solution corresponds to $\max(p_1, p_2, \dots, p_k)$.