

99 questions/Solutions/36

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(**) Determine the prime factors of a given positive integer.

Construct a list containing the prime factors and their multiplicity.

```
prime_factors_mult n = map swap $ encode $ primeFactors n
  where swap (x,y) = (y,x)
```

using primeFactors from problem 35 to generate the list of prime factors in ascending order, and encode from problem 10 to compress this list to a list of numbers paired with their multiplicity.

Without relying on encode from problem 10, but using group from Data.List:

```
prime_factors_mult = map encode . group . primeFactors
  where encode xs = (head xs, length xs)
```

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