Factorial Formula [Microsoft Python Interview Question]

Given a number n, write a formula that returns $n!$.

In case you forgot the factorial formula, $n!=n*(n-1)*(n-2)*.....2*1$ $n!=n*(n-1)*(n-2)*.....2*1$.

For example, $5!=5*4*3*2*1=120$ $5!=5*4*3*2*1=120$ so we'd return 120.

Assume is n is a non-negative integer.

p.s. if this problem seems too trivial, try the follow-up Microsoft interview problem Factorial Trailing Zeroes