

Solution Review: The Factorial of a Number

This lesson explains the solution for the factorial of a number exercise.

WE'LL COVER THE FOLLOWING ^

- Solution
- Explanation

Solution

```
let rec fact = (n: int) => {  
  /* Check if n is 0 or 1 */  
  switch (n) {  
    | 0 => 1; /* Base case */  
    | n => n * fact(n - 1) /* Make recursive calls and multiply each time */  
  };  
};  
  
Js.log(fact(5));
```



Explanation

This problem can be solved easily using recursion. We already know that in the simplest case (base case) of $n = 0$, the factorial is 1 .

In all other cases, we have to compute $n * (n - 1)$, so we can make a recursive call for that.

Since we have only two basic scenarios, we can handle them using a `switch` expression. For the recursive call, the current value of n is multiplied by the value retrieved from the next recursive call.

