Solution Review: Count Even Integers in a List

This lesson explains the solution for the count even integers in a list.

WE'LL COVER THE FOLLOWING

- Solution
- Explanation

Solution

```
let list = [10, 3, 17, 23, 40, 22, 99];

let rec countEven = (myList) => {
  switch(myList) {
    | [] => 0 /* Base case -> Return 0 */
    | [head, ...tail] => {
      if(head mod 2 == 0){
        1 + countEven(tail); /* recursive call with increment if head is even */
      } else {
        countEven(tail); /* Recursive call without increment */
      }
    }
  };
};

Js.log(countEven(list));
```

Explanation

The solution relies heavily on recursion. In the base case, we have the empty list, which simply returns `0`.

However, when we destructure the list in the form, `[head, ...tail]`, the `head` variable has an integer in it. We check if this number is even. If it is, the function returns `1` added to the output of the recursive call on the rest of the list

list.

Since the rest of the list is in `tail`, we call the function on that.