

```
1 # Complete the stepPerms function below.
2 def stepPerms(n):
3     # when we're looking at how many steps we can take, we
4
5     # we can use memoization!
6     # basically we check if this combination is in our
7     # calculate and add it. If it is, then we just ret
8
9     # we could either loop one step, two steps, or three s
10    memo = {1: 1, 2: 2, 3: 4}
11    #
12    return stepPermsRecursive(n, memo)
13    # maybe we create a helper function
14    # base case: is it present in the memo, if not then we
15
16 def stepPermsRecursive(n, memo):
17     # base case - check if our object already exists in me
18     # if n in memo:
19     #     return memo[n]
20
21     if n not in memo:
22         memo[n] = stepPermsRecursive(n-1,memo) + stepPermsRe
23         # call our recursive function, and we're going to ca
24         # call it for taking 1 step, 2 steps, and 3 steps, t
25         # store in our memo if our object does not exist
26
27     return memo[n]
28
```

