



I'm working on a R programming problem. The current program below is not working well. Can you help in fixing this program with as few changes as possible? Below I first provide the problem description and then the current buggy program.



Given an integer N, find the number of divisors of N that are divisible by 3.

Buggy Program:

```
find_divisors_divisible_by_3 <- function(N) {  
  count <- 0  
  for (i in 1:N) {  
    if (N %% i != 0 && i %% 3 == 0) {  
      count <- count + 1  
    }  
  }  
  return(count)  
}  
  
n <- 36  
count <- find_divisors_divisible_by_3(n)  
cat("Number of divisors of", n, "that are divisible by 3:", count, "\n")
```

Can you fix the above buggy program? Modify only the code within the function. Make sure that you make minimal possible changes needed to fix the program.

Show drafts



The bug in the program lies in the condition `N %% i != 0 && i %% 3 == 0`. This condition is checking for divisors of N that are not divisible by N (which is always true for all divisors) and are divisible by 3. The correct condition should only check if the current number `i` is a divisor of N and is divisible by 3.

Here's the corrected function:

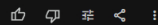
Code snippet

```
find_divisors_divisible_by_3 <- function(N) {  
  count <- 0  
  for (i in 1:N) {  
    if (N %% i == 0 && i %% 3 == 0) {  
      count <- count + 1  
    }  
  }  
  return(count)  
}
```

Use code [with caution](#).



The only change made is to replace `N %% i != 0` with `N %% i == 0`. This ensures that only divisors of N are counted.



Enter a prompt here

