

Assignment-1

Adithya Vardhan - EE18BTECH11008

Github repository

<https://github.com/Sadiq0123/C-and-DS/tree/main/Assignment-1>

execution of fun1(++n) and n+1 after execution of fun1(++n).

1 PROBLEM

Consider the following two functions:

```
void fun1(int n) {
    if (n==0) return;
    printf("%d",n);
    fun2(n-2);
    printf("%d",n);
}
void fun2(int n) {
    if (n==0) return;
    printf("%d",n);
    fun1(++n);
    printf("%d",n);
}
```

The output printed when fun1(5) is called is _.

2 SOLUTION

Answer: Option 1. 53423122233445

Given two functions will terminate when the input "n" is equal to zero.

Whenever we execute fun1(n), it will invoke fun2(n-2), if n is not equal to zero and there will be no change in the value in the value of n, before and after execution of fun2(n-2). So fun1(n) will print same n before and after execution of fun2(n-2).

But when we execute fun2(n), it will invoke fun1(++n), if n is not equal to zero. Let's say n is input-integer. So after the execution of fun1(++n), n will be assigned to input-integer+1. There will be an increment of 1 in n after execution of fun1(++n) when compared to n before execution of fun1(++n). So fun2(n) will print n before

