DS Lab 03

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Section: BCS-3J

Question 4

Code:

```
#include <iostream>
using namespace std;

int fun(int n)
{
    if (n > 100)
        return n - 10;

    return fun(fun(n + 11));
}

int main()

{
    int r;
    r = fun(95);

    cout << r;

return 0;
}
</pre>
```

Question 4 21K-3195

Dry Run:

Line Number	r	n	Function Call	Output
14			fun(95)	
4		95	fun(95)	
9			fun(fun(106))	
4		106	fun(106)	
4		96	fun(96)	
9			fun(fun(107))	
4		107	fun(107)	
4		97	fun(97)	
9			fun(fun(108))	
4		108	fun(108)	
4		98	fun(98)	
9			fun(fun(109))	
4		109	fun(109)	
4		99	fun(99)	
9			fun(fun(110))	
4		110	fun(110)	
4		100	fun(100)	
9			fun(fun(111))	
4		111	fun(111)	
4		101	fun(101)	
14	91			
16				91

Sufiyaan Usmani 21K-3195 fun(95) BCS-3J fun(106) retion 96 > fun(107) - retwn 97 >fun(108) -return 98 > fun (109) return 99 fun (110) return 100 fun(111) retion 101 fun(101) return 91