

Master Data Structure and Algorithms with C++:

Let's Upgrade Assignment 1:

Question 1

What is the time complexity $T(n)$ for the following code snippet?

```
a = 1
b = 1
while(b <= n)
{
    a += 1
    b += 1
    cout<<"Hi";
}
```

Solution:

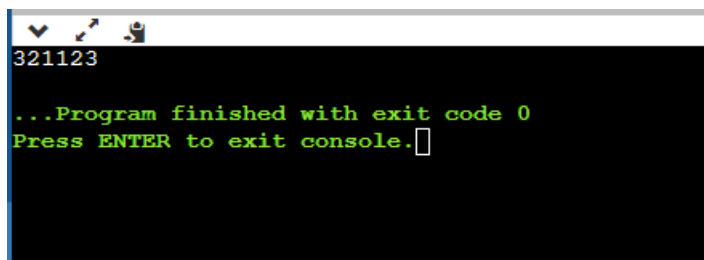
$T(n)=O(n)$

Question 2

Write the output for the following recursive code snippet for $n = 3$:

```
void fun(int n)
{
    if(n > 0)
    {
        cout<<n:
        fun(n - 1);
        cout<<n;
    }
}
```

Solution:



```
321123

...Program finished with exit code 0
Press ENTER to exit console.
```