**Assignment1**

**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";

}

**//output:** T(n)=O(n)=linear time complexity.

**Question 2: Write the output for the following recursive code snippet for n = 3:**

#include <iostream>

using namespace std;

void fun(int n)

{

if(n > 0)

{

cout<<n;

fun(n - 1);

cout<<n;

}

}

int main()

{

fun(3);

return 0;

}

**//output:**321123