**ASSIGNMENT [DAY-01]**

**COURSE NAME:-**

**MASTER DATA STRUCTURE AND ALGORITHMS WITH C++**

NAME :- AYESHA SIDDIQUA SHAIKH JABBAR

EMAIL:- [ayeshasiddiqua61240@gmail.com](mailto:ayeshasiddiqua61240@gmail.com)

PHONE NO.:- 9021111005

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";

}

ANSWER:

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;

}

}

OUTPUT:

321123