Day-1 Assignment answers.

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:

if n<0 then time Complexity is O(1)

but if n>0 then time Complexity is O(n)

so if we consider worst case then time Complexity is 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;

}

}

Answer:

output of the given code snippet will be 321123 for n=3.

Because of first cout output will be 321 and than output due to second cout will be 123.