

Find time complexity $T(n)$ for the following code snippet:

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

Answer is **$O(\sqrt{n})$**

Since it is increasing linearly, as it is a series of 3,6,10,15...

It take $O(\sqrt{n})$ to complete the while loop...