**Problem**

a = 1;

b = 1;

while(b < n)

{

a += 1;

b += a;

cout<<"Hi";

}

Let n=144 a=5+1=6 a=9+1=10 b=102+14=116

A=1+1=2 b=6+15=21 b=10+46=56

B=2+1=3

Now a=2+1=3 a=6+1=7 b=56+11=77 b=116+15=131

B=3+3=6 b=7+21=29

A=3+1=4 a=7+1=8 b=77+12=89 loop ended

B=4+6=10 b=8+29=37

A=4+1=5 a=8+1=9 b=89+13=102 hence T(n)=O(sqrt(n))

B=5+10=15 b=37+9=46