

```

Q int func (int n) {
    int s = 0;
    for ( int i = 1; i*i*i <= n; i++) {
        s = s + i;
    }
    return s;
}

```

\Rightarrow The inequality is that $i^3 \leq n$

For worst case, we consider the scenario where the number of iterations are maximum, i.e when $i^3 = n$

1, 2, 3 \rightarrow this is how "i" increments for the value of i , where $i^3 = n$, is the number of iterations performed

$$i^3 = n \Rightarrow i = n^{1/3}$$

\therefore There will be $n^{1/3}$ iterations in the worst case

$$\Rightarrow \boxed{\text{T.C.} = O(n^{1/3})}$$