

Data Structure and Algorithm

Day 1

1. Find the time complexity for the following scenarios

```
a)  for(i=1;i<=n;i++) {  
        for(j=i;i<=n;j++) {  
            printf("Hi");  
        }  
    }
```

Ans: $T_n = O(n^2)$

```
b)  for(i=1;i<=n;i*=3) {  
        for(j=1;j<=n;j++) {  
            printf("Hello");  
        }  
    }
```

Ans: $T_n = O(n)$