

Example 1:

```
void fun(int n)
{
    if (n <= 0)
        return ;
    print ("GFG");
    fun(n/2);
    fun(n/2);
}
```

$$T(n) = T(n/2) + T(n/2) + \theta(1)$$
$$T(0) = \theta(1)$$

Example 2

```
void fun(int n)
{
    if (n <= 0)
        return;
    for(int i=0; i<n; i++)
        print ("GFG");
    fun(n/2);
    fun(n/2);
}
```

$$T(n) = T(n/2) + T(n/2) + \theta(n)$$
$$T(0) = \theta(1)$$

Example 3

```
void fun(int n)
{
    if (n <= 1)
        return;
    print ("GFG");
    fun(n-1);
}
```

$$T(n) = T(n-1) + \theta(1)$$
$$T(1) = \theta(1)$$

