

## 61. Minimum time to collect all apple in a tree

### Code:

```
def minTimeToCollectApples(n, edges, hasApple):  
  
    graph = [[] for _ in range(n)]  
    for u, v in edges:  
        graph[u].append(v)  
        graph[v].append(u)  
  
    visited = [False] * n  
  
    def dfs(node):  
        visited[node] = True  
        total_time = 0  
  
        for neighbor in graph[node]:  
            if not visited[neighbor]:  
                time_to_neighbor = dfs(neighbor)  
                if time_to_neighbor > 0 or hasApple[neighbor]:  
                    total_time += 2 + time_to_neighbor  
  
        return total_time  
    return dfs(0)  
  
n = 7  
edges = [[0,1],[0,2],[1,4],[1,5],[2,3],[2,6]]  
hasApple = [False, False, True, False, True, False, False]  
  
print(minTimeToCollectApples(n, edges, hasApple))
```

### Output:

6

### Time Complexity:

- $T(n) = O(n)$