61. Minimum Time to collect all apples in a Tree.

Program:

```
def min_time_to_collect_apples(n, edges, has_apple):



    graph = {i: [] for i in range(n)}

    for edge in edges:

        graph[edge[0]].append(edge[1])

        graph[edge[1]].append(edge[0])







    def dfs(node):

        total_time = 0

        for neighbor in graph[node]:

            if not visited[neighbor]:

                visited[neighbor] = True

                time = dfs(neighbor)

                if time > 0 or has_apple[neighbor]:

                    total_time += 2 + time

        return total_time



    visited = [False] * n
```

```
    visited[0] = True


    return dfs(0)


print(min_time_to_collect_apples(7,[[0,1],[0,2],[1,4],[1,5],[2,3],[2,6]],
[False,False,True,False,True,True,False]))   # Output: 8
```

Output: