

8 Puzzle IDS :-

```
def iddfs (src, target, depth):  
    visited_states = []  
    for i in range(1, depth+1):  
        if dfs (src, target, i, visited_states):  
            return True  
    return False
```

```
def dfs (src, target, limit, visited_states):  
    if src == target:  
        return True  
    if limit <= 0:  
        return False  
    visited_states.append(src)  
    adj = possible_moves (src, visited_states)  
    for move in adj:  
        if dfs (move, target, limit-1, visited_states):  
            return True  
    return False
```

Nitish