NAME: MOAZZAM FAROOQUI

**ROLL NO: CT-24068** 

**COURSE CODE: CT-159** 

**ASSIGNMENT: DSA PRACTICE SESSION TASK#5** 

Q1. SUBSETS

### **SOURCE CODE:**



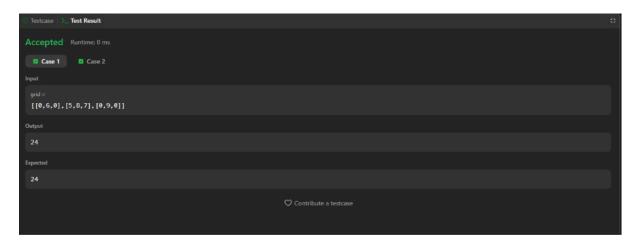
# **Q2. COMBINATION SUM**

# **SOURCE CODE:**



# Q3. PATH WITH MAXIMUM GOLD

## **SOURCE CODE:**



## Q4. WORD SEARCH

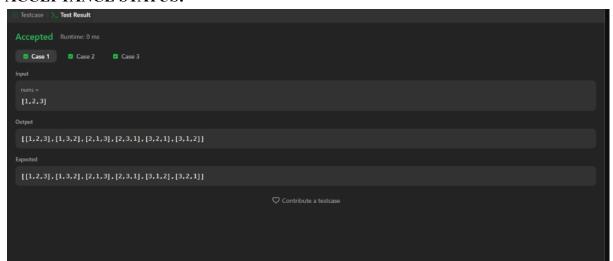
### **SOURCE CODE:**

```
bool dfs(vector<vector<char>>&board,string&word,int i,int j,int index){
    if(index==word.size())
        return true;
    if(i<0||i>=board.size()||j<0||j>=board[0].size())
        return false;
    if(board[i][j]!=word[index])
        return false;
    char temp=board[i][j];
    board[i][j]=**;
    bool found=dfs(board,word,i+1,j,index+1)||
        dfs(board,word,i-1,j,index+1)||
        dfs(board,word,i,j+1,index+1)||
        dfs(board,word,i,j-1,index+1);
    board[i][j]=temp;
    return found;
}
```

# **Q5. PERMUTATIONS**

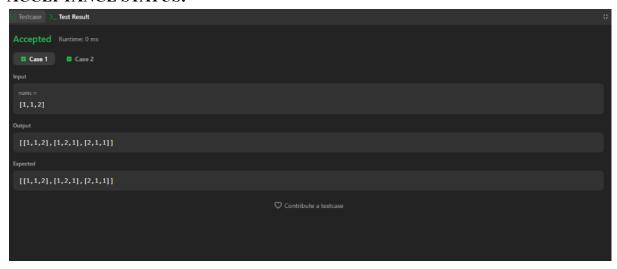
# **SOURCE CODE:**

```
## Auto ## Aut
```



# **Q6. PERMUTATIONS II**

# **SOURCE CODE:**



# Q7. FIND UNIQUE BINARY STRING

# **SOURCE CODE:**

