```cpp
//Q.2 Count the No. of subset with a given difference//

#include <iostream>
#include <vector>
#include <algorithm>
using namespace std;

int noOfSubset(vector<int> &arr, int n, int M)
{
    vector<vector<int>> dp(n + 1, vector<int>(M + 1));

    for (int i = 0; i <= n; i++)
    {
        for (int j = 0; j <= M; j++)
        {
            if (i == 0)
                dp[i][j] = 0;
            if (j == 0)
                dp[i][j] = 1;
        }
    }

    for (int i = 1; i <= n; i++)
    {
        for (int j = 0; j <= M; j++)
        {
            if (arr[i - 1] <= j)
                dp[i][j] = dp[i - 1][j - arr[i - 1]] + dp[i - 1][j];
            else
                dp[i][j] = dp[i - 1][j];
        }
    }

    return dp[n][M];
}

int main()
{
    int n = 9;
    vector<int> arr = {0, 0, 0, 0, 0, 0, 0, 0, 1};
    int diff = 1;

    int arrsum = 0;
    for (int i = 0; i < n; i++)
        arrsum += arr[i];

    int sum = (diff + arrsum) / 2;
    if (arrsum < diff || (diff + arrsum) % 2 != 0)
        cout << "answer is : " << 0 << endl;

    cout << "Answer is : " << noOfSubset(arr, n, sum);
}
```

```cpp
//Q.3 Target Sum //

#include <iostream>
#include <vector>
#include <algorithm>
using namespace std;

int targetSum(vector<int> &arr, int n, int M)
{
    vector<vector<int>> dp(n + 1, vector<int>(M + 1));

    for (int i = 0; i <= n; i++)
    {
        for (int j = 0; j <= M; j++)
        {
            if (i == 0)
                dp[i][j] = 0;
            if (j == 0)
                dp[i][j] = 1;
        }
    }

    for (int i = 1; i <= n; i++)
    {
        for (int j = 0; j <= M; j++) // j will start from 0 ???????????????
        {
            if (arr[i - 1] <= j)
                dp[i][j] = dp[i - 1][j - arr[i - 1]] + dp[i - 1][j];
            else
                dp[i][j] = dp[i - 1][j];
        }
    }

    return dp[n][M];
}

int main()
{
    int n = 9;
    vector<int> arr = {0, 0, 0, 0, 0, 0, 0, 0, 1};
    int diff = 1;

    int arrsum = 0;
    for (int i = 0; i < n; i++)
        arrsum += arr[i];

    int sum = (diff + arrsum) / 2;
    if (arrsum < diff || (diff + arrsum) % 2 != 0)
        cout << "answer is : " << 0 << endl;

    cout << "Answer is : " << targetSum(arr, n, sum);
}
```