public class SubsetSum3 {

public static boolean isSubsetSum(int[] arr, int n, int target) {

boolean[][] dp = new boolean[n + 1][target + 1];

for (int i = 0; i <= n; i++) {

dp[i][0] = true;

}

for (int i = 1; i <= n; i++) {

for (int j = 1; j <= target; j++) {

if (arr[i - 1] > j) {

dp[i][j] = dp[i - 1][j];

} else {

dp[i][j] = dp[i - 1][j] || dp[i - 1][j - arr[i - 1]];

}

}

}

return dp[n][target];

}

public static void main(String[] args) {

int[] arr = {3, 34, 4, 12, 5, 2};

int target = 9;

int n = arr.length;

boolean result = isSubsetSum(arr, n, target);

System.out.println("Subset with given sum exists: " + result);

}

}