## GTU Department of Computer Engineering $\begin{array}{c} {\rm CSE344 \text{ - Spring 2021}} \\ {\rm Homework~X~Report} \end{array}$

Akif Kartal 171044098

## 1 Problem Definition

The problem is to find if a subset of given array elements can sum up to the target num.

This problem called as SUBSETSUM which is one of the popular problem in dynamic programming. **Inputs:** arr(Array), num(target sum), size(size of Array)

Output: Possible or Not possible (0 or 1)

## 2 Solution

Since, this problem is a recursive backtracking problem I made my algorithm by using following approach.

## 2.1 Functions

First function is given function in homework I used it to check some extreme cases such as num is equal to 0 which is already Not Possible case and to initialize variables such as total sum.