

## **Competetive Programming**

### **BackTracking**

#### **Assignment 2-4**

**Week2-Wednesday**

#### **Code:**

```
import java.util.Scanner;

public class SubsetSum

{
    static boolean subsetSum(int[] arr, int index, int target) {

        if (target == 0)
            return true;

        if (index == arr.length || target < 0)
            return false;

        if (subsetSum(arr, index + 1, target - arr[index]))
            return true;

        return subsetSum(arr, index + 1, target);
    }

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int n = sc.nextInt();

        int[] arr = new int[n];

        for (int i = 0; i < n; i++) {
            arr[i] = sc.nextInt();
        }

        int target = sc.nextInt();

        boolean result = subsetSum(arr, 0, target);
    }
}
```

```
System.out.println(result);

sc.close();

}

}
```

The screenshot shows the Programiz Online Java Compiler interface. On the left, there is a file browser sidebar with icons for various file types. The main area has tabs for "Main.java" and other languages like C, C++, JS, TS, etc. The code editor contains the provided Java code. The "Run" button is highlighted in blue. To the right is the "Output" window, which displays the following text:

```
5
3 34 4 12 5
9
true
== Code Execution Successful ==
```