

## 模版·回溯法(子集总和问题)

```
public class SubsetSum{
    public static List<List<Integer>> subsetSum(int[] nums,int target){
        List<List<Integer>> result=new ArrayList<>();
        backtrack(nums,0,target,new ArrayList<>(),result);
        return result;
    }

    private static void backtrack(int[] nums,int startIndex,int target,List<Integer> current,List<List<Integer>> result){
        if(target==0){
            result.add(new ArrayList<>(current));
            return;
        }

        for(int i=startIndex;i<nums.length;i++){
            if(nums[i]>target){
                break;
            }

            current.add(nums[i]);
            backtrack(nums,i+1,target-nums[i],current,result);
            current.remove(current.size()-1);
        }
    }

    public static void main(String[] args){
        int[] nums={2,3,4,5,6,7};
        int target=7;

        List<List<Integer>> result=subsetSum(nums,target);
        System.out.println("满足目标总和"+target+"的子集: ");
        for(List<Integer> subset:result){
            System.out.println(subset);
        }
    }
}
```