

ASTEROID COLLISION

```
class Solution {  
    public int[] asteroidCollision(int[] asteroids) {  
        Stack<Integer> st = new Stack<>();  
        for(int a:asteroids){  
            boolean destroy=false;  
            while(!st.isEmpty() && st.peek()>0 && a<0)  
            {  
                if(Math.abs(st.peek())<Math.abs(a))  
                {  
                    st.pop();  
                }  
                else if(Math.abs(st.peek()) == Math.abs(a))  
                {  
                    st.pop();  
                    destroy=true;  
                    break;  
                }  
                else{  
                    destroy=true;  
                    break;  
                }  
            }  
            if(!destroy){  
                st.push(a);  
            }  
        }  
        int[] res = new int[st.size()];  
        for(int i= res.length-1;i>=0;i--)
```

```
{  
    res[i]=st.pop();  
}  
return res;  
}  
}
```