Sort a Stack

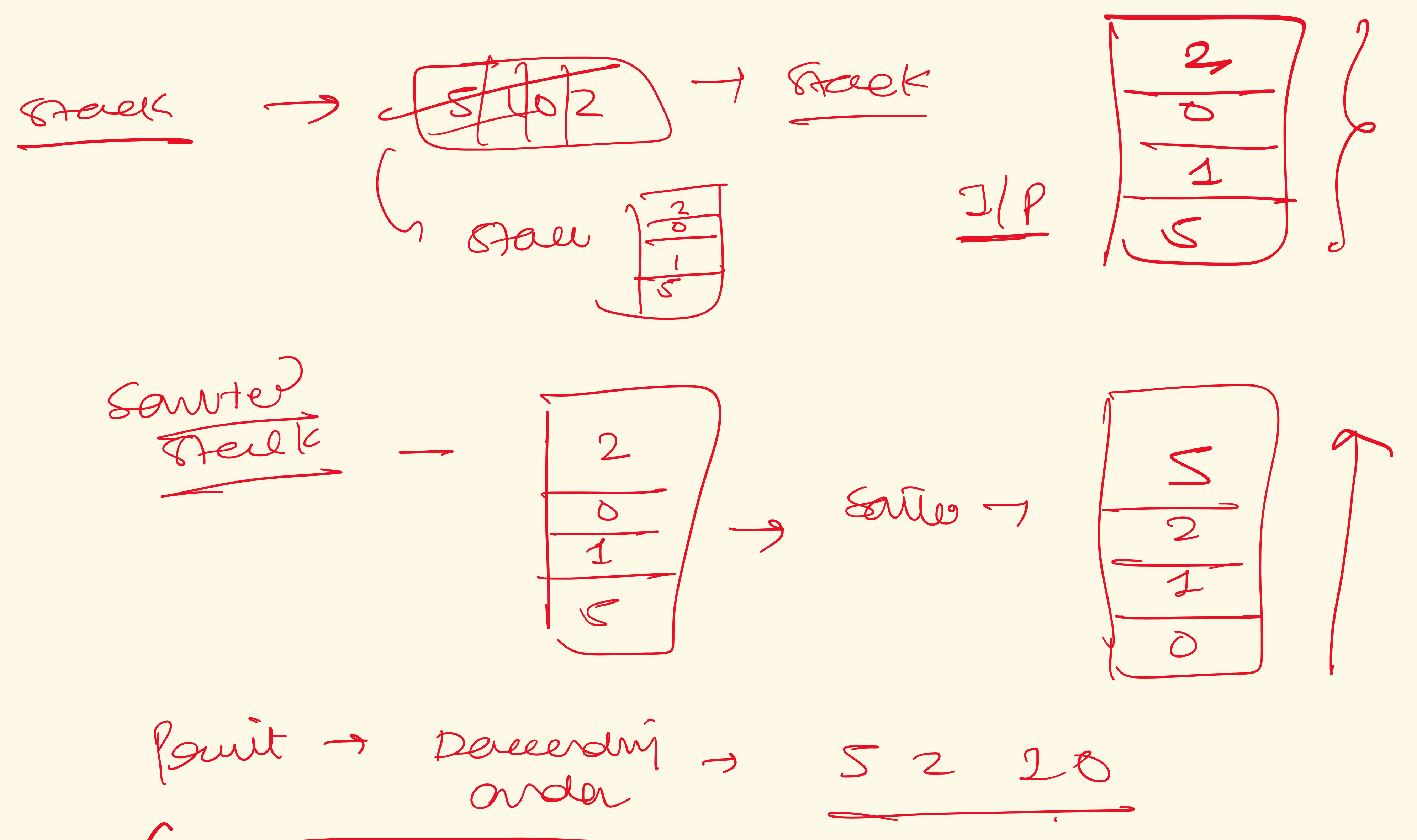
Sunday, 21 June 2020 6:01 AM

Sort a Stack

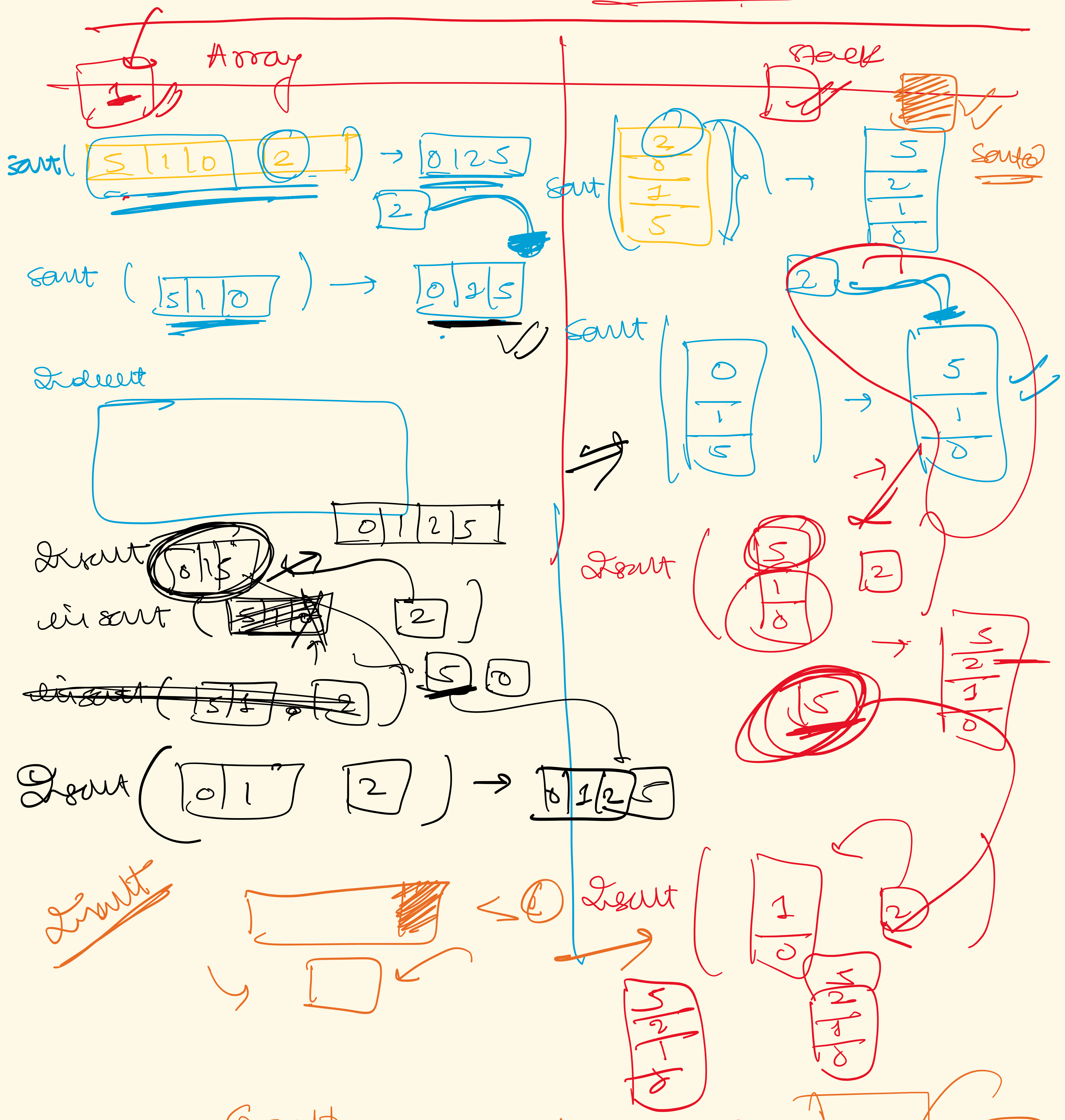
→ Pause → think → sort an Array

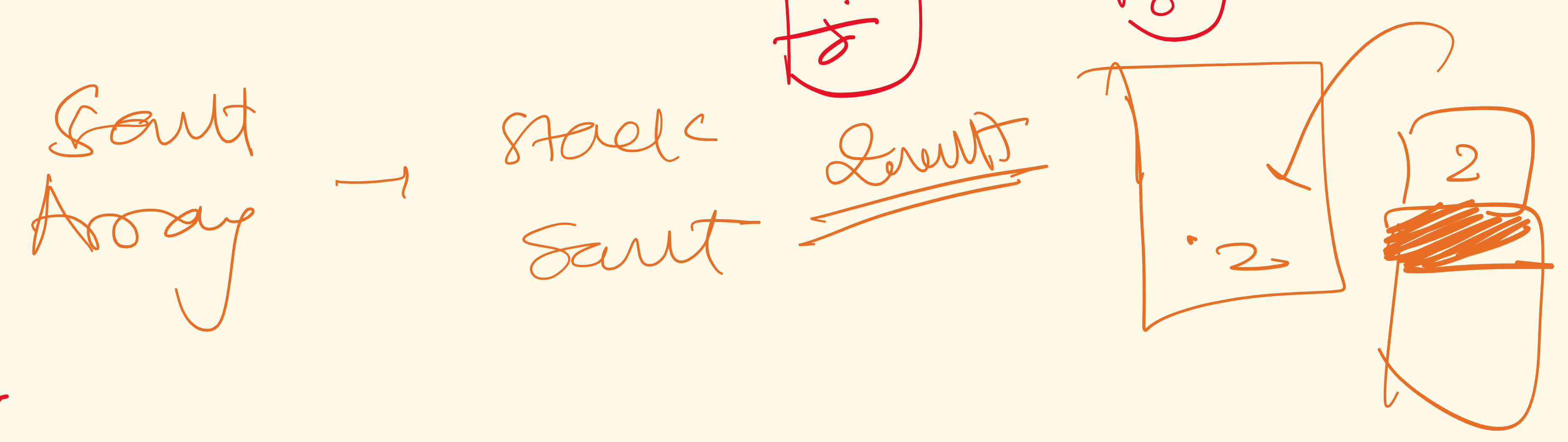
Flow:

- ~~Problem Statement~~
- ~~I/P~~ ~~O/P~~
- Explanation → Design (BC, Hypothesis, Induction) → RC
- Code



Point → Descending order → 5 2 1 0



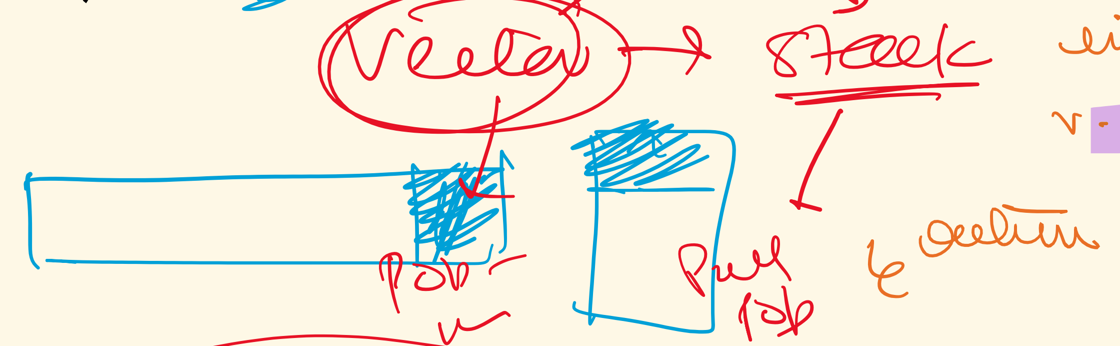


Code

vector / arr → stack<int>&s

```
void sort (vector<int>&v)        // stack<int>&s
{
    if (v.size() == 1)           // s.size
        return;
    int temp = v[v.size()-1]     // s.top()
    v.pop_back                   // s.pop()
    sort(v)                      // s
    insert(v, temp)              // s
    return
}

void insert(vector<int>&v, int temp)
{
    if (v.size() == 0 || v[v.size()-1] <= temp)   // s.size, s.top()
    {
        v.push_back(temp)        // s.push
        return
    }
    int val = v[v.size()-1]      // s.top()
    v.pop_back()                 // s.pop()
    insert(v, temp)
    v.push_back(val)             // s.push()
    return
}
```



Patreon + Notes