

Shelf of Plants [A, B, C, D]

### Plants here:

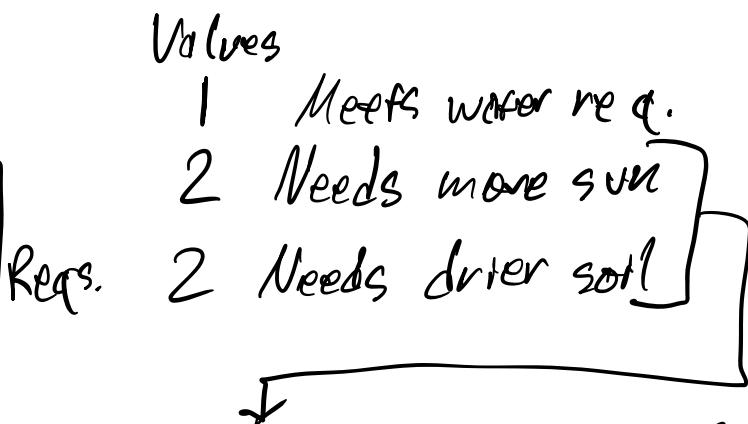
- Water requirement - Varies, under 5 (or something)
- Sun requirement - 3 types - Direct, moderate, indirect
- Soil requirement - How porous soil is, different plants like different soil

Let's just say Plant A is a cactus, will grow and thrive with dry soil, direct sunlight, and has a low water requirement.

Plant A	
Water	1
Sun	3
Soil	1

So, let's see what these requirements imply.

Plant A	
Water	1
Sun	3
Soil	1



These need to be met for A to grow.

When plant grows, you earn points

So, how long should it take for a plant to die?

If I start the game with a single plant, how many days until it dies if I choose to do nothing every turn?

If I think about a week...

1 2 3 4 5 6 7

Should it reddit take a couple of days to die

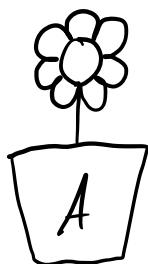
Plant A	
Water	2
Sun	2
Soil	2

Water	How much of water resource needed for plant to survive	Sun
1 low		1 indirect
2 med		2 moderate
3 high		3 direct

<u>Soil</u>
1 Dry
2 Med
3 Moist

<u>Plant A</u>
Water 3

Soil is at 2, meaning it drains slower than dry.



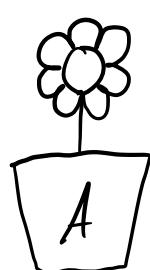
Game Start  
Water: 3

So, if you refuse to water this plant for 3 days, it will die on the 4th day and you lose. However, I want the rate at which it drains to depend on the soil type.

Let's say that the rate at which water drains from the moderate soil is every two days. So, it would look more like...

<u>Plant A</u>
Water 3
Soil 2

Water 3  
Soil 2



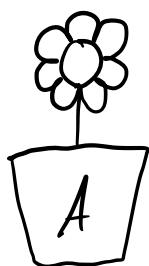
Plant will survive 6 days, user loses on the 7th.

Day 1 → Day 2 → Day 3  
Water 3 Water 3 Water 2  
Day 4 → Day 5 → Day 6 → Day 7  
Water 2 Water 1 Water 0

This doesn't account for sun, so how would the sun effect the death rate?

Well, let's first consider a plant with adequate sun...

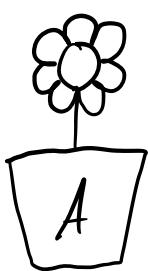
Plant A
Water 3
Soil 2
Sun 2



Water 3  
Soil 2  
Sun 2

Well, we don't want the plant to die faster, so it will still take 7 days for this plant to die.

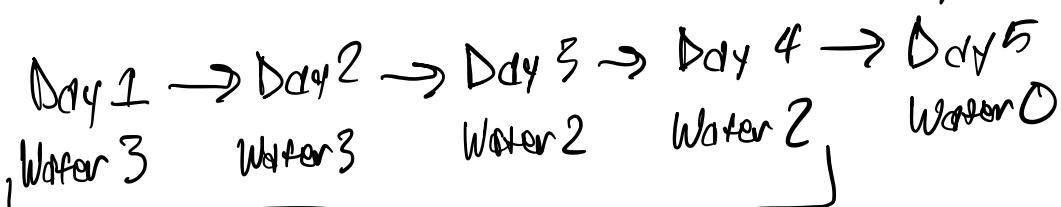
Plant A
Water 3
Soil 2
Sun 2



Water 3  
Soil 2  
Sun 1

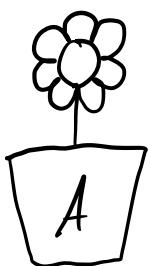
Lower than the amount of sun needed, so plant should die faster.

Let's say 3 days faster, so it'll die in 4 days, on day 5 instead.



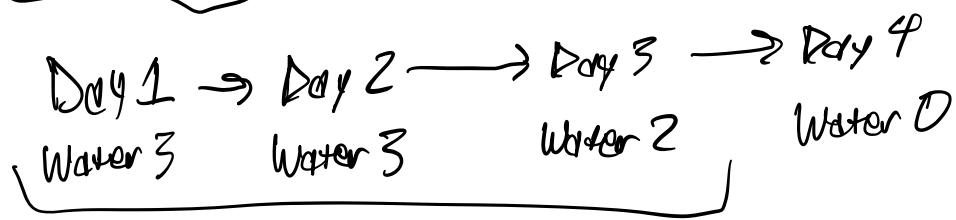
Have to make note make sense, but this is incorrect.

<u>Plant A</u>
Water 3
Soil 2
Sun 3



Water 3  
Soil 2  
Sun 1

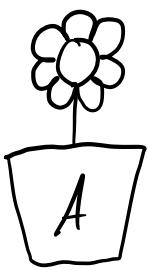
Plant has way less sun than required, dies much faster.  
Let's say it'll die on day 4



Probably switch these two, if sun req is 1 difference,  
Subtract 1 day. If 2 difference, subtract 2 days.

Example Described Below --

Plant A	
Water	3
Soil	2
Sun	2



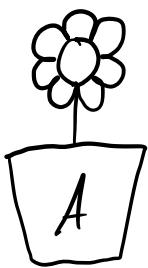
Water 3  
Soil 2  
Sun 1

Difference between sun and sun req'ts  
1, Decrease life by 1.

Day 1 → Day 2 → Day 3 → Day 4 → Day 5 → Day 6  
Water 3 Water 3 Water 2 Water 2 Water 1 Water 0

Will survive 5 days without correct amount of Sun

Plant A	
Water	3
Soil	2
Sun	3



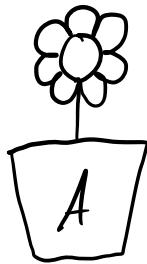
Water 3  
Soil 2  
Sun 1

Plant has way less sun than required, dies much faster.  
Decrease life by 2.  
Plant will survive 4 days.

Day 1 → Day 2 → Day 3 → Day 4 → Day 5  
Water 3 Water 3 Water 2 Water 1 Water 0

Will survive 4 days when there's way less light.

Plant A	
Water	3
Soil	2
Sun	2



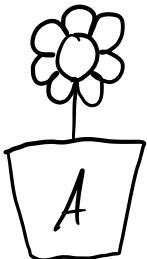
Water 3  
Soil 2  
Sun 2

Base Case to Survive

7 days.

So, what if the soil isn't right?

Plant A	
Water	3
Soil	2
Sun	2



Water 3  
Soil 1  
Sun 2

For now, let's just say it's just like the sun req.  
Soil grade diff is 1,  
so decreases like by 1 day. If 2, decrease by 2.

Soil grade 1 also drains faster...

Day 1 → Day 2 → Day 3 → Day 4  
Water 3      Water 2      Water 1      Water 0

So, since diff is 1...

Day 1 → Day 2 → Day 3  
Water 3      Water 2      Water 0

Survives 2 days

There should also be an effect for over-watering.  
So, If a plant is over-watered, it should die a  
day faster or something. If it stays over-watered,  
then the plant should die. How plant die depending  
on soil type. If soil cannot drain all of the water you  
add because the rate is slower than it'll take to  
return to the water requirement of a plant, then  
the plant will die.

Meaning: Staying above the water requirement for  
too long will kill your plant.