

\*Reading this week:

3.1 - 3.4 (DP - Dynamic Programming)

### CQ 5

what is the problem? given two strings determine if they share a common substring. A substring can be as small as one character

what is the goal? return yes if two strings share a common substring, return no if not.

what is the input/output? input: string1, string2  
output: "YES" or "NO"

Dummy example: twoStrings(String s1, String s2) s1 = "hello"  
s2 = "world"

create a counter

go through both strings simultaneously  
check if their

h	e	l	l	o
0	1	2	3	4

w	o	r	l	d
0	1	2	3	4

Q5

mars Exploration (string s)

dummy example: s = "SOS|SPS"

s%.

Idea/Intuition: ① make a count variable to track letters changed in transmission

② create a string checker to check each 3 letters of the "s" string

→ if they're a match, increment count

1.5 create a string array which will contain each three letters in indices respectively

ex) s = "SOS SPS SDS"

```
String[] partsOfString = ["SOS", "SPS", "SDS"]  
                        0      1      2
```

→ then check if checker == partsOfString(i)  
→ increment count