GWC Lesson 9

Partner Work and Comprehension

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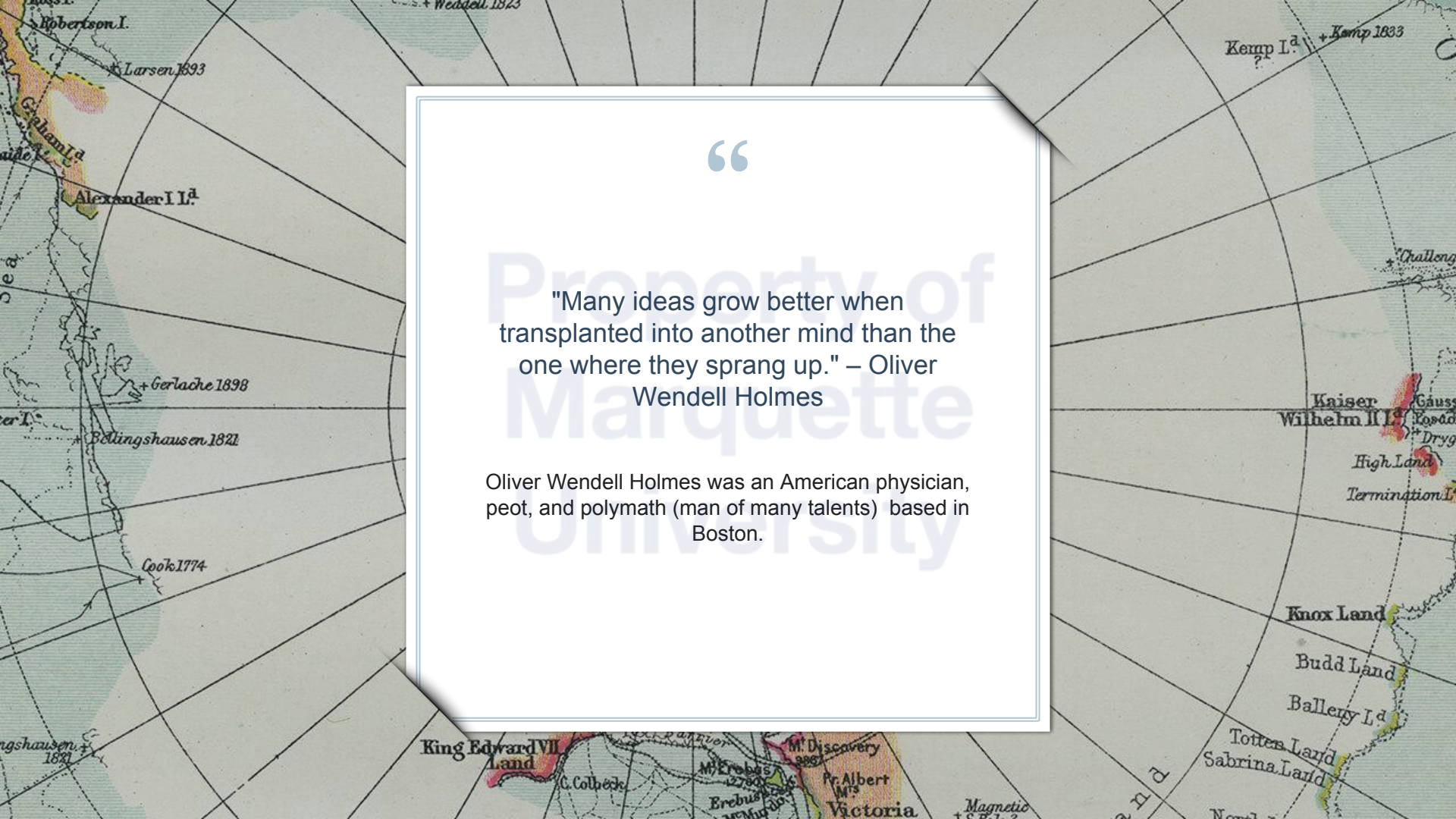

"Many ideas grow better when transplanted into another mind than the one where they sprang up." – Oliver Wendell Holmes

Oliver Wendell Holmes was an American physician, peot, and polymath (man of many talents) based in Boston.

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Review of Last Week's Activity

- The problem from last week was:
  - Take a string as an input for a function and then change the vowels in the string to be "*"
- Parts of the Project:
  - A function (this is not always necessary, but for this project I had you all make this project as a function)
  - A for loop that looped through the letters of a string
  - Conditional statements to check each part of the string we loop through
  - String creation using the loop/allocation of variables

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Function Type of the Project

- The function we used in this project was a void function, because it did not have a return statement
- The function had one parameter
- The parameter of the function was filled in, at the time of the function call at the end of your project
- For this project the parameter was a string type
- Why did we need this type of function and can someone explain what happens to the string parameter input.

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For loops and how they're used in the project

- Can someone explain what the i stands for in the for loop?
- What is the difference between the two project answer for loops?
- Why do we use the range function in a loop?
- How can we loop through a list?
- Why + how can we loop through a string?

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Conditional Statements

If this do this, else if this do this, else do this.

- There are three types of statements you can use when constructing a conditional statement
- If + (some condition): if statements are usually first, they define what condition you want to meet
- Elif + (some condition): elif aka “else if” is a statement that will come after the first if condition, but allows you to define a secondary condition
- Else: else statements do not specify a condition BECAUSE an else statement stands for: IF THE INPUT DOES NOT SATISFY ANY OF THE CONDITIONS YOU DEFINED PREVIOUSLY: DO THIS

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Your Code ...

```
1
2  alist = [15,20,4,23,35,8]
3
4  for i in alist:
5      if i%5==0:
6          print(i)
7      else:
8          print("not divisible by 5")
```

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Hint:

There are 5 different iterations (loops)

What happens for each loop?

Hint: % operator returns the remainder, i%5 ==0 means i is divisible by 5
If i = 10: 10%5 does equal 0, so 10 is divisible by 5

Partner Activity (very similar to last)

- Password maker part 2
- For this problem we will create a function called passwords and it will take one string parameter (astring), then for each vowel in the string, the vowel will be replace by a number that represents the order of vowels in that word:
  - Katie == K0t12
  - Food == F01d
- You will need an empty string variable and also a counter to keep track of the vowel number you're on
- EXTRA CREDIT: try to implement this with a user input for the string parameter

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Dice Roller Simulator

- For this you will need to use the python library called Random: import random
  - Use random.**randint**(*a*, *b*) where a = start and b = end value
- You will need to ask a user if they want to roll the dice, yes for go, no for quit the program.
- Use a while loop to keep rolling dice unless the user input equals “no”
- The random generator will generate a number between 1 and 6 and then print the number to the screen as “you rolled a “ + (number rolled)

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