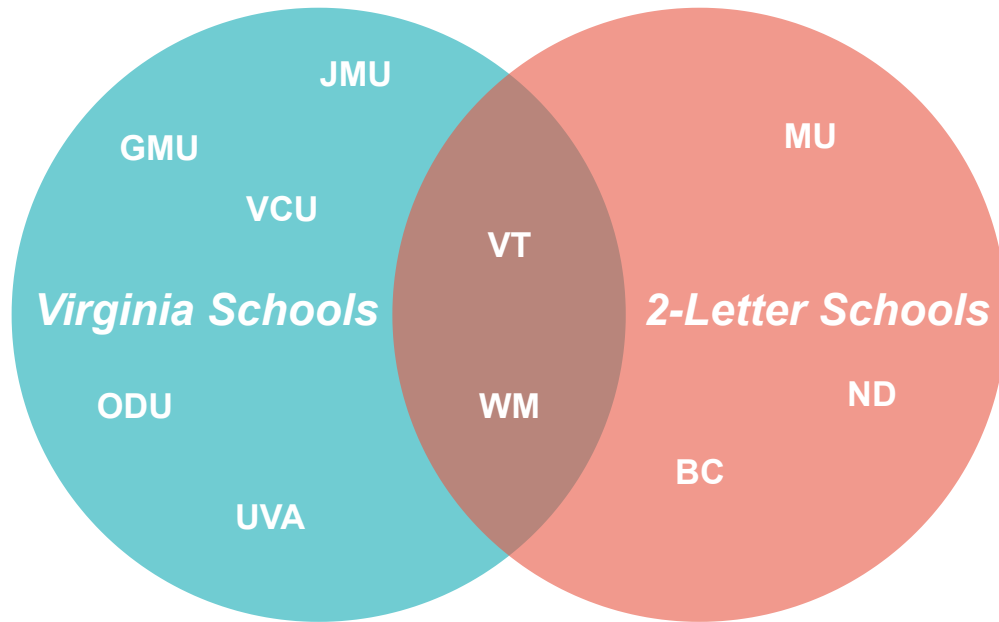


School Acronyms

Venn Diagram:



Python Code:

```
va_schools = {"JMU", "GMU", "VCU", "VT", "ODU", "WM", "UVA"}
two_letter = {"MU", "VT", "ND", "WM", "BC"}
```

Questions (15 min)

Start time:

1. As a team, predict the value of each expression. Then run each expression in a Python Shell, and record the actual value. Discuss any differences between the predicted and actual values.

Python code	Predicted value	Actual value
<code>type(va_schools)</code>		
<code>len(two_letter)</code>		
<code>"ND" in va_schools</code>		
<code>"JMU" not in two_letter</code>		
<code>len(va_schools.union(two_letter))</code>		
<code>va_schools.intersection(two_letter)</code>		
<code>two_letter.difference(va_schools)</code>		

2. Identify the following operations used in the previous question.

a) Built-in functions:

b) Built-in operators:

c) Methods of a `set`:

3. Predict the result of the following code. Then run the code in a Python Shell, and compare with your prediction.

```
va_schools.remove("GMU")
va_schools.remove("ODU")
va_schools.remove("VCU")
print(va_schools)
```

4. Predict the result of the following code, based on the result of the previous question. Then run the code in a Python Shell, and compare with your prediction.

```
va_schools.add("JMU")
va_schools.add("JMU")
va_schools.add("JMU")
print(va_schools)
```

5. Summarize the properties of a `set` object. For each answer, explain why.

a) Is a `set` mutable or immutable?

b) Can a `set` contain duplicate values?

c) Is the order of `set` values predictable?

6. Identify differences between a `set` and a `list` in Python.