

**Questions:**

1. What happens when a number becomes too large and goes above the maximum value that the data type can hold?
2. Are floating numbers more accurate or more precise?
3. What is the difference between typing "A" and 'A' in Java?
4. Is this valid code?

```
int a = 5;
```

```
int final b = 3;
```

```
b += a;
```

5. When evaluating an expression, how is the data type chosen in Java?

**Answers:**

1. Overflow! When a value becomes larger than the maximum value, it loops back around to the minimum value which can lead to some pretty big issues with storing data and being able to accurately access it.
2. They are more precise, the numbers are closer together but not necessarily the most accurate.
3. Double quotes signify a string, while single quotes signify a character. A character can be associated with an ASCII character value.
4. No, this code is attempting to modify a constant since it was declared using the final keyword.
5. It is chosen by selecting the data type that takes up the most room in memory in order to avoid any loss in data.