**1. Values and Expressions**

* \* - Expression (Multiplication)
* 'hello' - Value (String)
* -87.8 - Value (Floating-point number)
* - - Expression (Subtraction )
* / - Expression (Division)
* + - Expression (Addition)
* 6 - Value (Integer)

**2. Difference Between a String and a Variable**

* **String**: A sequence of characters enclosed in quotes (e.g., 'hello'). It is a type of data used to represent text.
* **Variable**: A name that can store data (e.g., x, message). A variable can hold different types of data, including strings, numbers, etc.

**3. Three Different Data Types**

1. **Integer**: A whole number, positive or negative, without a decimal point
2. **Floating-point number**: A number that has a decimal point
3. **String**: A sequence of characters enclosed in quotes

**4. What is an Expression Made Up of? What Do All Expressions Do?**

* An expression is made up of values, variables, and operators (e.g., 2 + 3, bacon + 1).
* All expressions evaluate to a single value. For example, 2 + 3 evaluates to 5.

**5. Difference Between an Expression and a Statement**

* **Expression**: Evaluates to a value. For example, 2 + 3 is an expression that evaluates to 5.
* **Statement**: Performs an action. For example, an assignment statement like spam = 10 assigns the value 10 to the variable spam.

**6. Value of the Variable bacon**

The variable bacon will still contain 22 because the expression bacon + 1 is not assigned back to bacon. To change its value, you would need bacon = bacon + 1.

**7. Values of the Following Terms**

* 'spam' + 'spamspam' - This concatenates the two strings, resulting in 'spamspamspam'.
* 'spam' \* 3 - This repeats the string 'spam' three times, resulting in 'spamspamspam'.

**8. Why is eggs a Valid Variable Name while 100 is Invalid?**

* eggs is a valid variable name because it follows the rules for variable naming: it starts with a letter and can include letters, numbers, and underscores.
* 100 is invalid as a variable name because variable names cannot start with a number.

**9. Functions to Get Different Data Types**

* int() - Converts a value to an integer.
* float() - Converts a value to a floating-point number.
* str() - Converts a value to a string.

**10. Why Does This Expression Cause an Error, and How to Fix It?**

* This expression causes a TypeError because you can't concatenate a string ('I have eaten ') with an integer (99).
* To fix it, you can convert 99 to a string using str(99):

This will output: 'I have eaten 99 burritos.'