1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

\*

'hello'

-87.8

-

/

6

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| **Answer:**  Values: ‘hello’, -87.8 and 6  Expression: \* , - , / , + |

2. What is the difference between string and variable?

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| **Answer:**  String is data type for variable text.  Variable is like container which holds data value. Variable can be of type String, Integer, Float etc. |

3. Describe three different data types.

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| **Answer:**  String: Holds text data  Integer: Holds whole numeric data without decimal values.  Float: Holds numeric data with decimal values |

4. What is an expression made up of? What do all expressions do?

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| **Answer:**  Expression is combination of Operators, constantans and variables.  Expressions perform mathematical operations. |

5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

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| **Answer:**  Expression contain variables, operators, and constantans. Expression returns a value.  Statement is what is make up of a lines.  Expressions are statements as well. |

6. After running the following code, what does the variable bacon contain?

bacon = 22

bacon + 1

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| **Answer:** 23 |

7. What should the values of the following two terms be?

'spam' + 'spamspam'

'spam' \* 3

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| **Answer:**  'spam' + 'spamspam' = 'spamspamspam'  'spam' \* 3 = 'spamspamspam'  Same result for both operations. |

8. Why is eggs a valid variable name while 100 is invalid?

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| **Answer:**  A variable name must start with a letter or the underscore character. |

9. What three functions can be used to get the integer, floating-point number, or string version of a value?

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| **Answer:**  For integer: int()  For Floating – point number : float()  For string : string() |

10. Why does this expression cause an error? How can you fix it?

'I have eaten ' + 99 + ' burritos.'

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| **Answer:**  String can’t be concatenated with integer i.e. 99 in thi case.  To fix it, convert 99 into string, as below:  I have eaten ' + '99' + ' burritos.' |