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

ANS- integer-(-87.8,6) String-('hello') Expressions- (- ,/,+)

2. What is the difference between string and variable?

ANS- VARIABLE- the name of the location in the primary memory.

STRING-data type of the variable.

3. Describe three different data types.

ANS- 1. **String** -A character, which may be a letter of some alphabet, a digit, a blank space, a punctuation mark, etc. A string, which is a sequence of characters. Strings are typically used to represent words and text Eg. abc.

2. **integer-** is a data type that represents some range of mathematical integers Eg. 123.

3. **Boolean**- is a data type that has one of two possible values (usually denoted true and false) to represent the two truth values of logic and Boolean algebra.

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

ANS- An expression is an made up of variables, operators, and method , which are constructed according to the syntax of the language. that evaluates to a value. You've examples of expressions: int result = 1 + 2; // result is now 3.

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

ANS- an “expression” is a combination of values and functions that are combined and interpreted by the compiler to create a new value. While a “statement” which is just a standalone unit of execution and doesn't return anything.

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

bacon = 22

bacon + 1

ANS-23.

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

ANS-'spam' + 'spamspam'

ANS- 'spamspamspam'

'spam' \* 3

ANS- - 'spamspamspam'

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

ANS-Because Variable names cannot begin with a number.

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

ANS- int(25) ,float("1.25"), str(“CH”).

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

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

ANS- because 99 is an integer it cannot be concatenated with strings, if we have to concatenate it we need to do typecasting. 'I have eaten ' +str(“ 99”) + ' burritos.'