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:** In the above elements

**Operators: +,-,\*, /**

**Values: 'hello', -88.5, 5**

2. What is the difference between string and variable?

**Ans: String** is a collection of characters ane we pick individual characters with the help of index value.We can use variable in string.

String characters using single or double quotes

**Variable** is something that holds a value that may change.In simplest terms,a variable is a just a box that you can put stuff in it.you can use all variables to store all kinds of stuff.

**example: a = "Govardhan"**

**a is a variable and "Govardhan" is a string**

3. Describe three different data types.

**Ans:**

**Data Types Examples Explanation**

**Integers 53476 whole numbers**

**Floats 34.567 Decimal numbers**

**Booleans True,False Truth values that represents yes or no**

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

**Ans:** An expression is a combination of operators and operands that is interpreted to produce some other value.In any programming language, an expression is evaluated as per the precedence of its operators.

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

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?

'spam' + 'spamspam'

'spam' \* 3

**Ans: 'spam' + 'spamspam' = 'spamspamspam'**

**'spam' \* 3 = 'spamspamspam'**

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

**Ans: variable names cannont begin with a number so eggs a valid variable name.**

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

**Ans: The Int(),float(), and str() these functions can be used to get the integer,floating-point,or string version of value.**

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

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

**Ans: This expression cause error because it can only concatenate str not on "int" to str. only strings can concatenate to other string.**

**The correct way is ' I have eaten' + str(99) + 'burritos'**