**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**.

\* =expression

'hello'=value

-87.8=value

- =expression

/ =expression

+=expression

6 =value

**2. What is the difference between string and variable?**

**Ans:** veriable is a kind of empty box that you fill with store data or value in a program,

Strings are data,so we can use them to fillup a veriable and strings always start and end

With quotes.

**3. Describe three different data types.**

**Ans: 1. Integer:** integer can store only numerical value

**2.Float:** float can store only floating values such as 20.99,23.33,etc.

**3.list**: the list is used for store multiple data items in a single variable.

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

**Ans:** expression is made up of values,containers,and mathematical operators.

All expressions evaluate to a single value

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

**Ans**: expression is made up of values,containers,and mathematical operators(operands) and the statement is just like a command that a python interpreter executes like print.

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

**bacon = 22**

**bacon + 1**

**ans:** The bacon variable is set to 22. The bacon+1 expression does not reassign the value in bacon(that would need an assignment statement:bacon=bacon+1)

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

**'spam' + 'spamspam'**

**'spam' \* 3**

**Ans:** In both cases the value will be ‘spamspamspam’

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

**Ans:** veriable name can not start 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(), float(),and str() function will evaluate to the integer,floating-point number,and string version of the value passed to them

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

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

**Ans:** The expression cause an error because 99 is an integer and only concatenate str (not “int” ) to str with + operator, if we have to concatenate it we need to do typecasting

The correct way is

‘i have eaten’ + ‘99’ + ‘ burritos.’ **Or** ‘i have eaten’+str(99)+’burritos.’