**ANSWERS**

**Q1. 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.**

**Ans.**

* \* is Mathematical Operator
* 'hello' is Value
* -87.8 is Value
* - is mathematical Operator
* / is Mathematical Operator
* + is Mathematical Operator
* 6 is Value

**Q2. What is the difference between string and variable?**

**Ans.** A variable is a store of information and a string is type of information that we store in a variable.

For eg.

Let us consider X as “Good Morning”. In this case X is variable i.e a store of information and “Good Morning” is a string i.e a type of information that we are storing in variable X.

**Q3. Describe three different data types.**

**Ans.** Three different data types in python are as follows :

1. Numeric Data types – int(integer), float, complex
2. String Data types – str(string)
3. Boolean Data types – bool(boolean)

**Q4. What is an expression made up of? What do all expressions do?**

**Ans.** An expression is a combination of values and operators. All expressions evaluate (that is, reduce) to a single value.

**Q5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?**

**Ans.** The major difference is that an expression evaluates to a single value and a statement does not.

**Q6. After running the following code, what does the variable bacon contain?**

bacon = 22

bacon + 1

**Ans.** After running the above code, the answer comes out to be 23 as we have assigned a value of 22 to our variable “bacon” and then we add 1 to it and therefore the answer comes out to be 23.

**Q7. What should the values of the following two terms be?**

'spam' + 'spamspam'

'spam' \* 3

**Ans.** The answer to the above codes are as follows :

* spamspamspam
* spamspamspam

**Q8. Why is eggs a valid variable name while 100 is invalid?**

**Ans.** Eggs is a valid variable name and 100 is not because variable names cannot begin with a number.

**Q9. 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() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

**Q10. Why does this expression cause an error? How can you fix it?**

‘I have eaten ‘ + 99 + ‘ burritos.’

**Ans.** The above code causes an error as python allows to concatenate a string to string and it doesn’t allow string to concatenate to an integer. To fix this we can convert “99”(integer) to “Ninety-Nine”(string). So, the correct code now becomes :

‘I have eaten ‘ + ‘Niinety-nine’ + ‘ burritos.’