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?

variables are symbols that you can use to store data in a program you can think of them as an empty box that you fill with some data or value strings are data so we can usr them to fill up avariable

3. Describe three different data types.

String to classify “Text” eg ; hello world

integer to identify “whole number” eg 10

floating point to designate number with ‘decimal points” eg 15.25

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

An expression is a combination if operators,constat and variables.An expression may consist of one or more operands ,and zero or more operators to produce a value

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

An expression evaluates to single value and a statement does not true.

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

bacon = 22

bacon + 1

The bacon variable is set to 20. 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

Both expressions evaluate to the string ’spamspamspam’

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

Variable name 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?

The int() ,float(),and str() function will evaluate to the integer, floating-point number and string versions of the value passed to them

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

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

The xpression causes an error because 99 is an integer and only strings can be concatenated to other strings with the + operator. the correct way is I have eaten+ str(99)+ ‘burritos’.