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.

Ans:

\*

->expression

'hello'

->value

-87.8

->value

-

->expression

/

->expression

+

->expression

6

->value

2. What is the difference between string and variable?

Ans:

String: these are alphanumeric characters written inside quotes : "cat11", 'dANger'

Variable: It acts as a container to contain a value.

3. Describe three different data types.

Ans:

Boolean: these are used to represent logical values. Eg: TRUE, FALSE

Integer: these are used to store numerical values eg: 1,20,300 etc…

Float: these are used to store float number values or numbers with decimal points eg: 55.45,12.1 etc…

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

An expression is a combination of operators and operands that is interpreted to produce some other value. example:

     X=20+30  ,expressions are used to evaluate the values or show results.

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

Ans: Expression is made up of operands, operators,values, variables etc.. and the statement is like a command that a python interpreter executes like print,return,break etc...

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

bacon = 22

bacon + 1

Ans: It contains the value 23

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

'spam' + 'spamspam'

'spam' \* 3

Ans: Both will have same answer that is : ‘spamspamspam’

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

Ans:Because 100 is an integer and variables can’t start with integer it should start with a alphabet like string, therefore eggs is a valid variable.

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

ans: we can use str() for string, int() for integer,float() for floating point number

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

'I have eaten' + 99 + 'burritos'

Ans:  It show error because 99 is an integer and we cannot concatenate integers and string. To fix this we can put 99 inside quotes and make it a string ,i.e ‘99’

So, it will be ‘I have eaten’+’99’+’burritos’