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:

* - Operator

'hello' - string

-87.8 - float

- - special character

/ - special character

6 - integer

2. What is the difference between string and variable?

Ans: Variable**:**-Use to store value in programming.

String**: -** It is sequence of characters which is represented inside single quote or double quote.

3. Describe three different data types?

Ans: Number   :   a. Integer

b. Float

c. Complex

Sequence type: a. String

b. List

c. Tuple

Dictionary: Dictionary is an unordered set of a key-value pair of items.

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

Ans: Expression is a combination of operators and operands.

Expression is to obtain a final value using operators.

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

Ans: Expressions is used to obtain value using operators and operands, while statements are use for declaration. Statements create side effects which are useful like spam =10 is used as 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?

a.'spam' + 'spamspam'   b.'spam' * 3

Ans: a .spamspamspam

b .spamspamspam

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

Ans. Variable names can start with alphabets but cannot with numbers. So 100 is invalid name.

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

Ans: for integer - int(), floating-float(), string – str()

10. Why does this expression cause an error? How can you fix it?
'I have eaten ' + 99 + ' burritos.'

Ans: we can't add string with integer . If we remove the single quote before and after integer ('I have eaten + 99 + burritos.') it can be fixed .