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.

Given	Answer
*	Expression
'hello'	Value
-87.8	value
-	Expression
/	Expression
+	Expression
6	value

2. What is the difference between string and variable?

String	Variable
String is combination of different characters.	Variables are used to store data in memory.
It can contain any characters.	It an contains alphabets(a-z and A-Z), numerical (0-9) and _(underscore).
No such restriction.	Variable must start with alphabets or _
Must be enclosed in quotes("" or '').	We declare variable by writing the variable name and using = operator to assign value.
A keyword enclosed in quotes does not act as a keyword.	Variable cannot have same name a keywords(reserved words)
Strings can be assigned in variables(as it is a data type)	Not vice versa

3. Describe three different data types.

Integer	Integers are whole numbers, without a fractional component. They can be positive or negative. Eg: x=10 Y=-11
Float	Floats represent real numbers and are written with a decimal point. Eg: x=10.05
String	Strings in Python are sequences of character data. They are created by enclosing characters in quotes. S="Hello World" Print(S)

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.

In any programming language, an expression is evaluated as per the precedence of its operators

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

Expressions produce a value, and that value will be passed into the function. Statements don't produce a value, and so they can't be used as function arguments. A statement in Python is a logical instruction that the Python interpreter can read and execute. In general, a statement performs some action or action.

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

bacon = 22 # assigning 22 to bacon

bacon + 1 # adding 1 to bacon but not assigning . (23)

Hence bacon will contain 22

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

'spam' + 'spamspam' #spamspamspam

'spam' * 3 #spamspamspam

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

According to predefined constrain in python language, a variable can only start with an alphabet or underscore. If we try to declare a variable starting with numeric character ,it will throw SyntaxError.

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() functions 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 expression 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. '.