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**:

**1**.String is data whereas variable is symbol.

**2**.String always appears on right hand side of assignment operator whereas variable can be on right hand side or left hand side of assignment operator.

3. Describe three different data types.

**Ans**:

**1.**integer-includes positive and negative whole numbers without decimal point.

**2**.float-includes positive and negative numbers with decimal point.

**3**.string-includes collection of characters in single/double/tripple quotes

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

**Ans**: Expression is made of mathematical operator, and operands. Expression does mathematical operation on operands. e.g. expression "10+20" does addition of number 10 and 20. Expression always returns result which can be stored in variable or can be directly printed."+"operator when works on strings operands it will concatenates two strings.

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

**Ans:** expression holds operands on both side of the operator.whereas statement has variable on left hand side which store value provided on right hand side of the operator.

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?

'spam' + 'spamspam'

'spam' \* 3

**Ans:**

**1**. 'spamspamspam'

2.'spamspamspam'

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

**Ans:** variable name always start with letter not with number.so eggs is valid variable name while 100 is invalid.

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

**Ans: 1.**to get integer number: **int(value)**

**2.**to get floating-point number: **float(value)**

**3**.to get string : **str(value)**

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

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

**Ans**: expression should contain string operands on both sides of '+' operator.Here one of the operand is integer so we get error.

**correct expression**: 'I have eaten ' + '99'+ ' burritos.'