

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.

\*

'hello'

-87.8

-

/

+

6

**Answer-** expressions/operators= \*, -, /, +  
values= hello, -87.8, 6

2. What is the difference between string and variable?

**Answer-**

A string is a literal text or sequence of characters., i.e. 'Hello'  
A variable is something that stores data.It can store a string, int, float, etc.

3. Describe three different data types.

**Answer-**

- **Integers** – It is represented by int. It contains positive or negative whole numbers (without fraction or decimal).
- **Float** – It is represented by float. It is specified by a decimal point.
- **Complex Numbers** – Complex number is represented by complex class.  
For example –  $5+2j$

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

**Answer-**

Expression is made up of operators and values together. Expression evaluates to single value or meaning.

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

### Answer-

Expression evaluates to single value or meaning. But statement does not.

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

```
bacon = 22
```

```
bacon + 1
```

### Answer-

bacon still contain 22 only. If `bacon=bacon+1` is given, then its value will be changed.

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

```
'spam' + 'spamspam'
```

```
'spam' * 3
```

### Answer-

both's answer= `spamspamspam`

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

### Answer-

variable name can't begin with a number like `100`.

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

### Answer-

`int()`, `float()`, `str()`

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

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

**Answer-** It will show error because `99` is an int. if it is string, then all three would be summed up. And even if it written as `str(99)`, then it can be added too.