**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**

Ans: The following are values or expression

* ‘hello’
* -87.8
* 6

These are the operators: \*, -, /, +

**2. What is the difference between string and variable?**

Variable can store different types of data (which are of valid data types) of the format such as float, integer, double, characters strings etc.

The string is a specific data type that contains one (or) a sequence of characters and is usually defined by characters between the quotes “.”

**3. Describe three different data types.**

Three fundamental Data types in python are int, float, complex.

1. **int data type**: We can use int data type to represent whole numbers (integral values)
2. **float data type**: We can use float data type to represent floating point values (decimal values)
3. **complex data type**: Complex number is represented by complex class. It is specified as (real part) + (imaginary part)j.
4. What is an expression made up of? What do all expressions do?

An expression is a combination of values, variables, operators, and calls to functions. Expressions need to be evaluated. If we ask Python to print an expression, the interpreter evaluates the expression and displays the result.

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

* An expression is a combination of values, variables, and operators.When we type an expression at the prompt, the interpreter evaluates it, which means that it finds the value of the expression.

**eg:** 4\*5+20-40 is an example of a statement

* A statement is a unit of code that has an effect, like creating a variable or displaying a value.When we type a statement, the interpreter executes it, which means that it does whatever the statement says. In general, statements don’t have values.

**eg:** variable declaration and assignment are statements because they do not return a value

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

**bacon = 22**

**bacon + 1**

It will still remain 22 ( = bacon).

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

**'spam' + 'spamspam'**

**'spam' \* 3**

‘spamspamspam’

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

Identifier can be string but must not start with a number.

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

Integer – int()

Float -float()

String - str()

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

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

Since we are trying to concatenate a string and an integer, the above line gives an error.

To fix: 'I have eaten ' + *str(99)* + ' burritos.'