

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.

* → expression

'hello' → values

-87.8 → values

- → expression

/ → expression

+ → expression

6 → values

2. What is the difference between string and variable?

Ans- A variable is basically the name of the location in the primary memory of your computer. This can be chosen by you. A variable can store everything from strings to numbers. A string is the values inside the quotes assigned to a string.

3. Describe three different data types.

Ans- Int, float, complex

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

Ans- An expression is a mix of various operators which is used to produce a result. Expressions are used to represent a value.

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

Ans- Expressions contain operators, identifiers, which include mathematical and Boolean functions, whereas Statements are simple line or several lines of code. In python expressions are also considered as statements.

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 – In python variable name cannot start with a number, hence 100 is invalid and eggs are valid since it starts with a letter.

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

Ans- a='abcdefg'

to get integer values

I=int(a)

print(i)

to get floating -point number

F=float(a)

print(f)

to get string

S=string(a)

print(S)

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

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

Ans – The above expression causes an error as it contains a string and a integer value, which cannot be concatenated.

To fix this issue we can change the 99 from an integer to a string. Below is the code fix

```
a='I have eaten ' + str(99) + ' burritos.'  
print(a)
```

I have eaten 99 burritos.