

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'

~ string str()

-87.8

~ integer int()

-

~ mathematical operator

/

~ mathematical operator (division)

+ ~ mathematical operator (addition)

6 integer int()

2. What is the difference between string and variable?

ANS : String is a type of datatype which is represented as str with single or double quotes , for example : "hello world" , while variable is a score in which particular datatype is set to evaluate value to perform tasks . Variable can be any datatype for example str (), int , Boolean , float

3. Describe three different data types.

A(i): Boolean : It is a type of datatype which involve the statements in either true or false accordingly . wherein T true has the value of 1 and F false

(ii): string : Represented as 'str' and it an order of sequence of characters for example – "hello" , 'sammy' , "2000"

(iii): Floating point : Numbers with a decimal point . for example : 2.3 , 100.0

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

Ans : An expression is a combine form of operators and operands and these both interpret to produce some other value . Made up of variables , operators and operands .

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

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

```
bacon = 22
```

```
bacon + 1
```

Answer : 23

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

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

```
'spam' * 3
```

Answer : (i) 'spamspamspam'

(ii) 'spamspamspam'

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

Ans: eggs is valid because it is beginning with letters and 100 is invalid because variable cannot begin with a number .

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

Ans: integer = int()

Floating point number = float()

String = str()

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

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

Ans: This particular expression is causing an error because strings concatenate operator (+) for strings in python doesn't know how to convert numeric types into strings implicitly.

