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 ) Expressions : \*, -, / ,+

values : ‘hello’, -87.8, 6

2. What is the difference between string and variable?

Ans ) A string is a datatype in python where as a variable is a name allocated to a memory location to store data of different types like string, integer, etc.

1. Describe three different data types.

Ans ) Integer : It is a numeric value which can be either negative or positive. Mathematical operations an be performed on integer datatype.

Float : It is a numeric datatype which has decimal values i.e the values after point in the number. It can store values up to 4 decimal places after point.

Double : It is a numeric datatype which has decimal values and it can store value up to 6 decimal places after point.

String : It is a datatype mainly used to store English alphabets. It can also store numbers but mathematical operations cannot be performed on them.

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

Ans) Expressions are made of symbols like ==, +, - ,/, \* . They are used to solve computational problems like addition , subtractions, multiplication , division. They can also be used to compare two or more values.

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

Ans ) Here statement spam=10. The value of 10 is assigned to the variable named spam. Where an expression is which we perform an operation on the variable.

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

bacon = 22

bacon + 1

Ans ) bacon=22 .The value is incremented by 1 but not assigned to variable. So the value will be unchanged.

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

'spam' + 'spamspam'

'spam' \* 3

Ans ) ‘spam’+’spamspam’ = 'spamspamspam'

‘spam’ \* 3 = 'spamspamspam'

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

Ans) There are set of rules in declaring a variable name. A variable name cannot be a number or it cannot start with number. So egg is a valid variable name and 100 is not.

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

Ans ) for integer : int()

for floating point : float()

for string : str()

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

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

Ans) It causes error because a string cannot be directly concatenated with a integer it first need to be converted into string datatype. It can be fixed by **'I have eaten ' + str(99) + ' burritos.'**