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.

\* Mathematical operators

'hello’ string

-87.8 Float

- mathematical operator

/ Mathematical operator

* mathematical operator

6 Integer

2. What is the difference between string and variable?

Ans- string is contains some word or numbers. But variable have changeable value which is change as per we give it to them.

3. Describe three different data types.

Ans-

Boolean- There are only two data type in the Boolen data type of python, that is True or False.

Numeric- Real number with out decimal number like ‘1’ is know as integer and number with decimal like ‘1.0’ is know as floating number. A number with the real and imaginary number is known as complex number like ‘3+4j’.

Strings- A string is a sequence of Unicode characters. In python string represented between “ “ or ‘ ‘ or “ “”.

For example – “anurag” or ‘anurag’ or “anuraganurag””

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

Ans- An expression is set of operator and operands that is interpreted to produce some other value. In any programming language, an expression is evaluated as per the precedence of its operators. So that if there is more than one operator in an expression, their precedence decides which operation will be performed first.

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

Ans- expression contains an operator while statement don’t have any operator.

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

bacon = 22

bacon + 1

Ans- 22

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

'spam' + 'spamspam'

'spam' \* 3

Ans – ‘spamspamspam’

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

Ans- 100 is a real integer number which is predefined in the system and have a fix value, while eggs is can save different value in it.

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

Ans- 1. Int(1.14)

2. a= ( “14 anurag garg”)

a[0:1]

3. a=5.20

Int(a)

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

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

Ans- expression 99 is an integer while rest 2 are string. We need to treat 99 as a string.

Correct expression will be - 'I have eaten ' +str( 99) + ' burritos.'