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.

\* **Expressions**

'hello' **Value**

-87.8 **Value**

- **Expressions**

/ **Expressions**

+ **Expressions**

6 **Value**

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

The difference between variable and string is variable mainly used to store the data and string is a data itself. It can be stored in any variable.

Variable can be represent by some defined formats i.e \_abc, X, \_123z.

String can be represent in single or double inverted quote i.e ‘ ‘ or “ “.

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

Variables can store data of different types i.e. int, float, str, bool, complex, range

1.Str data type is representation of string values i.e if a = ‘ABC’, type(a) = str

2.float data type is a representation of float values i.e if a = 25.3 , type(a) = float

3.bool data type is representation of Boolean values i.e a = True ,type(a) = bool

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

An expression is made up of operators and values which can produce some other value.

i.e In case of arithmetic expression, it can perform the addition of two numbers with the help of ‘ +’ & ‘=’ operators and gives produced value as a result.(2+3 =5)

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

Variable bacon will contain value 23

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

'spam' + 'spamspam'

'spamspamspam'

'spam' \* 3

'spamspamspam'

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

Because variable enggs contains all the characters and it fulfils the python variable declaration conditions

But variable 100 is invalid because it contains numeric values which is not

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

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

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