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:1. Values:’hello’,-87.8,6**

**2.Expressions: \* , -, /,+**

2. What is the difference between string and variable?

**ANS: Variable which holds a value (string , int,float etc) and while declaring we don’t write this in the ‘’**

**String : We write this in between the ‘ ‘ or “ “. We can iterate through the string**

**Ex var=’shiva’ Here var is a variable and ‘shiva’ is string**

3. Describe three different data types.

**Ans: 1. Integers(int) 2.Float(float) 3. Complex 4. Boolean(True or False) 5.String(Str)**

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

**ANS: Expressions are made up of the mathematical operators ,values, variables.**

**Evaluates the expression to get the final result**

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

**ANS: Expression evaluates to a value . Statement represent action like input statement.**

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

bacon = 22

bacon + 1

**ANS: As there is no assignment to bacon . bacon remains 22.**

**Bacon=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:Variable cant start from integer so 100 is invalid variable. variable can start from alphabets or \_**

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

**ANS: int(9), float(9) , str(9)**

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

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

**ANS:As we cant concatenate the string with integer values. It will result in type error.**

**To concatenate every values should be of same type.**

**‘I have eaten’+’99’+’buritos.’**