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.

\* : expression

'hello' : values

-87.8 : values

- : expressions

/ : expressions

* : expressions

6 : values

2. What is the difference between string and variable?

A : Strings are text with single quotes or double quotes. For ex : “Hello Sudhanshu” or ‘Hello Sudhanshu’

Variables : A python variable is a pointer to an object or object itself. Values can be assigned to the variables for ex : a=10 here “a” is a variable

3. Describe three different data types.

1) String : Strings are text with single quotes or double quotes. For ex : “Hello Sudhanshu” or ‘Hello Sudhanshu’2)List : It contains any integers , strings, complex numbers anything basically within “[]” 3)Dictionary : It consist of key value pairs { "Intent" : "billing", "Entities = Payment",}

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

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

A : Statements represent an action or command e.g print statements, assignment statements. Expression is a combination of variables, operations and values

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

bacon = 22

bacon + 1

A : The variable bacon is added by 1 that means it now holds “23”

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

A : 'spam' + 'spamspam' : 'spamspamspam'

'spam' \* 3 : 'spamspamspam'

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

A variable name cannot start with a number. A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and \_ )

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

A: int() , float() , and str( )

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

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

A : It cannot concatenate 'str' and 'int' objects. We can fix it by removing integer value 99 from the string

'I have eaten'+ ' burritos '