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

**1A. elements = {‘values’ : 6; ‘expressions’ : ‘\*’, ‘-‘, ‘/’, ‘+’}**

2. What is the difference between string and variable?

**2A. A Variable is used to store any kind of data, where as a string is a datatype which has some number of characters.**

3. Describe three different data types.

**3A. INT: int is a datatype which supports integers.**

**STRING: string is a datatype which is a sequence of Unicode characters. String is immutable and it can be accessed using the index positions.**

**BOOL: bool is a datatype which represents either true or false.**

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

**4A. An expression is made up of operators and operands. Expressions gives some value.**

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

**5A. Expression produce a value as a output, but statement may or may not produces result.**

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

bacon = 22

bacon + 1

**6A. 22**

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

'spam' + 'spamspam'

'spam' \* 3

**7A. ‘spamspamspam’**

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

**8A. ‘eggs’ is a valid variable because it starts with letter and word doesn’t contain a special character, but  
‘100’ is invalid because a variable must not start with a number.**

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

**9A. integer - int()**

**Floating point - float()**

**String - str()**

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

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

**10A. The above expression causes an error because string and integer cannot be added,**

**To fix this we can change to this form:**

***'I have eaten ' , 99 , ' burritos.'***