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.

Ans.

\* expression

'hello' values

-87.8 values

- values

/ expression

* expression

6 values

2. What is the difference between string and variable?

Ans. String is set of sequential data in which data is arranged in proper sequence. whereas variable is used to store data type whether it may be int or string or float

3. Describe three different data types.

Ans. There are following data types 1) Integer 2) Float 3)string 4) Float

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

Ans. Expression is made up of number of operators like addition or multiplication or subtraction operators, values, variables and these can be used to do the same operation like addition, multiplication or subtraction which is nothing but **evaluation of given data**.

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

Ans. Expression is combination of operators,values,variables like above, that is spam =10 contains spam as variable, = is assignment operator and 10 is value.Expression evaluates the value and statement does some action like print some statement etc

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

bacon = 22

bacon + 1

**Ans. integer value which is 23**

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

Ans.

'spam' + 'spamspam'= **‘spamspamspam’**

'spam' \* 3= **‘spamspamspam’**

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

Ans. Variable should not be start with number or any special character like @,$ # etc except “\_”, it should be started with characters.Hence eggs is valid variable and 100 is invalid

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

Ans. Int(), float(), str() these are three functions used to get integer the integer, floating-point number, or string version of a value respectively

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

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

Ans. Here expression contain integer and string data type , therefore in order to add data type, they should be of same data type like int+int or str+str **so in order to fix it 99 which is of int data type we can convert it into str data type by just putting 99 into “ “** .and we can fix that problem