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. expressions :- \*, '-, /

Values:- 'hello', -87.8, 6

2. What is the difference between string and variable?

Ans. a string is a value representing text a variable is a name that can refer to any value quotes, double or single, (they mean the same, but can’t be matched with each other) are used to create string literals, the quotes are there to indicate that the text that they enclose is not code, it is a value

3. Describe three different data types.

Ans. Int:- Contains all the integers

float:- Contains real number(decimals as well)

char:- contain all the charecter alphabet, number, etc

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

Ans. An expression is a combination of operators, constants and variables. An expression may consist of one or more operands, and zero or more operators to produce a value.

eg. a+b, c, s-1/7\*f, ., etc.

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

Ans. Statements:- A statement performs some action.

eg.print("Hello World"), sleep(1000)

Expression :- An expression evaluates to some value.

eg. "Hello World", 1000.

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

bacon = 22

bacon + 1

Ans. bacon = 23

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

'spam' + 'spamspam'

'spam' \* 3

Ans. 'spamspamspam' and 'spamspamspam'

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

Ans. char is a valid variable name, but Number cannot be a name of variable.

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

Ans. int() for integer, float() for floating-point number and str() for string version of a value

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

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

Ans. It is not possible to concatinate interger with string we could change number to string. eg. 'I have eaten ' + '99' + ' burritos.'