**1. What are the differences between operators and values in the following?**

**Operators - \* - / +**

**Values - ‘hello’, -87.8, 6**

* The difference between operators and values are that the operators do arithmetic operation with the value we provide and gives our output value as we want**.**

**2. What is the difference between string and variable?**

**spam**

**'spam'**

* Variables usually hold a memory space for us to hold a value/information we input and on the other hand string is the one type of information that we uses

**3. Describe three different data forms.**

* **Data forms** – discrete data , continues data , nominal data and ordinal data forms
* **Data types** – integer, string, Boolean, decimal and floating point number, character

**4. What makes up an expression? What are the functions of all expressions?**

* It is a line of code that contains values and operators to do some logical/arithmetic operation and it gives us a result

**5. In this chapter, assignment statements such as spam = 10 were added. What's the difference between a declaration and an expression?**

* Expression is a combination of values and operators and it will do arithmetic/logical operation and give us some output
* on the other hand declaration is assigning a value/data to a variable

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

**bacon = 22**

**bacon + 1**

* the output become **23**

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

**'spam' + 'spamspam'** - spamspamspam

**'spam' \* 3 -** spamspamspam

* Both the expression mentioned above will give the same output.

**8. Why is it that eggs is a true variable name but 100 is not?**

* Variable name must be a identifiers not a value , here 100 is value so it won’t accept and it will through error

**9. Which of the following three functions may be used to convert a value to an integer, a floating-point number, or a string?**

* **Value to integer** - we can use in-build method **int ()**
* **Value to float-point number** - we can use in-build method **float()**
* **Value to string** - we can use in-build method **str()**

**10. What is the error caused by this expression? What would you do about it?**

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

* Only a string will concatenate to another string not to a integer value , to overcome this we can add a quotation to ‘99’ and make it as a string then we can concatenate it to the strings
* **'I have eaten ' + ‘99’+ ' burritos.'**