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

\*

'hello'

-87.8

-

/

+

6

**Ans**. - Operator is use to assign the value/objects or expression whereas value is data/objects

\* is for multiplication of objects

‘hello’ is a value

-87.8 is floating number

- is arithmetic operator (minus)

/ is arithmetic operator (division)

+ is arithmetic operator (plus)

6 is a value

2. What is the difference between string and variable?

**Ans**. Variable is a place to store the data. If we have to store data in RAM we use variable. For ex. “ A = ‘hello’ ”.

String is a type of data which is stored in variable.

spam - is variable

'spam' – is a string which is stored in variable ‘ ‘

3. Describe three different data forms.

**Ans**.

1. Floating number is a number with decimal.

a = 1.6

type(a) = float

1. Boolean

Data in True or False form

A = True

Type(A) = Bool

1. Integer

Data which numerical without decimal

A = 12434

Type(A) = Integer

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

**Ans**. Expression are the mathematical operator which do some sort of computation. Expression are the part of statement.

For exp. + Plus

- Minus

/ divide

\* multiply

% percentage

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

**Ans**. Declaration is assigning variable with data type.

Spam = 10, we have assign integer data type with variable spam.

Expression calls the mathematical function like

Spam = 10

Tan = 20

Spam + Tan

30

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

bacon = 22

bacon + 1

**Ans**. 23

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

'spam' + 'spamspam'

'spam' \* 3

**Ans**. 'spamspamspam'

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

**Ans**. Python forbids the variable starts with number, variable can be alphanumeric when number is after alphabets

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

Ans.

Int()

Float()

String()

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

'I have eaten ' + 99 + ' burritos.

**Ans**. Error will be

can only concatenate str (not "int") to str

I will typecast 99 to str

**'I have eaten ' + str(99) + ' burritos.'**