

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

*--- An Arithmetic operator used to multiply two operands

'hello' -- It's an example of a string data type

-87.8 -It's an example of float data type

- an arithmetic operator used to subtract two operands

/ - an arithmetic operator used to divide two operands

+ -an arithmetic operator used to add two operands

6 - it's an example of integer datatype.

2. What is the difference between string and variable?

spam --- A variable used to store the data

'spam' - string is a data type.

3. Describe three different data forms.

- 1.structured data(ex Table in DB)
2. un structured data(ex pdf,docs..)
3. semi structured data(ex XML)

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

Expression is a combination of operators and operands.

Ex : $a=b+c*2c-4d$

The functions of all expression is to evaluate the expressions based on operator precedence and give the result.

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

Declaration means declare the value to the variable directly. EX:a=10, name="Sai"

Expression will perform some operation before assigning a value to the variable

EX :a=b+c,....

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

```
bacon = 22
```

```
bacon + 1
```

O/P=22 , because we are incrementing but not assigning again.

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

```
'spam' + 'spamspam'
```

```
'spam' * 3
```

1. spamspamspam
2. spamspamspam

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

we have some conditions to define variable

ie .it should not be a number

All variable names must begin with a letter of the alphabet or an underscore(_).

After the first initial letter, variable names can also contain letters and numbers.

Variable names are case sensitive.

No spaces or special characters are allowed

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

1.int(value)

2.float(value)

3.string(value).

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

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

Type Error : we cannot concatenate string and integer