ASSIGNMENT-1

1.values= -87.8,"hello",6

  Expressions= *,-,/,+

2.Difference Between string and variable

String	Variable
*String is a built-in classs in python named 'str' with many handy features.	*Variable is named location used to store data in memory
*Strings in python are immutable i.e they cannot be changed after they are created. We can do different operations on strings like we can add two strings,find the length of the string,slicing operation e.t.c	*unlike other programming languages,such as c,java, python has no command for declaring a variable, so we can create one when we assign a value to it.

3.Describe Three different data types

1.Numeric data type:

The numeric data type in python represents the data that has a numeric value.It contains positive or negative values.These values are defined by python int,python float,python complex.

Integer-This value is represented by int class.There is no limit to how long an integer value can be.

Ex- 1,2,234,7659787

Float-This value is represented by float class. It is a real values with a floating point representation.

Ex- 2.13,3.14,5.8776

Complex Numbers- Complex numbers are represented by the complex class.It is specified as (real part+imaginary part) i.e a+bi form.

Ex-2+3i,4+7i

2.String Data Type:

String data type in python is a collection of one or more characters put in a single quote,double quote, or a tripe quote. In python there is no character data type,a character is a string of length one. It is represented by the class 'str'.

Ex- "delhi","Karnataka","ramu",'raju'

3.Boolean Data type

Boolean data type has two built in values there are 'True','False'.True and False with capital 'T'and 'F' are valid other wise python will throw an error.

Ex- print(3>2) →prints True.

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

An expression is a combination of values,variables,operators and calls and functions.Expressions need to be evaluated.In any programming language,an expression is evaluated as per the

precedence of its operators.so that if there is more than one operator in an expression, there precedence decides which operation will be performed first.we have many different types of expressions in python like constant expression,arithmetic expression,integral expression,relational expression, logical expression.

The expression in python produces some value or result after being interpreted by the python interpreter.For example lest us evaluate an expression

A=2+3*4

Print(A)

The out of the above expression is 14.

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

*The expressions are evaluated to produce a value,where as statements do not have a value.statements may modify the program state or contrl its execution flow.

*Expressions are used in places where a value is expected,such as assignment or function arguments.statements are usually composed of multiple expressions and control structures.

*Expressions can be combined to form more complex expressions.statements are usually composed of multiple expressions and control structures.

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

bacon = 22

bacon+1

It contains the value as 22

Because to change or upgrade the value of bacon we need to do as bacon=bacon+1

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

'spam'+'spamspam'

'spam'*3

The output of the both the statements is 'spamspamspam'.

8.why eggs s valid variable name while 100 is inavalid?

eggs is a valid variable name in python because it satifies the rules of the python to declare the name of the variable in pyhton i.e it starts with an alphabet which is acceptable in pyhton.Where as 100 is not because it does not satisfy the condition that it is starting with the numeric value which is not acceptable in python i.e the name of the variable can start with the alphabet or an underscore but it should not start with numbers and special characters.

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

The int(),float(),str() are three functions used to get the integer,floating-point number or string version of value>

For example:

int(3.14)→gives integer value of 3.14 i.e 3

float(3)→ gives the floating point value i.e 3.0000

str(3.14)→ gives string version of the 3.14 i.e '3.14'

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

'I have eaten'+99+'burritos'

The above expression will throw an error because '+' in string is used for concatenantion but it is only between strings but not between strings and other other data type here it is given between string and an interger which is not possible hence to fix it we nes to change the integer 99 as string '99'

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