**Assingment- 1 (Sahdev Saini)**

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.

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'hello' **Value**

-87.8 **Value**

-  **Expression**

/ **Expression**

* **Expression**

6 **Value**

2. What is the difference between string and variable?

**Ans:-**

**String is a collection of characters terminated at null character and Variable is the allocation of memory space which is use to store information is to reference and manipulated in computer system.**

3. Describe three different data types.

**Ans:-**

**The three Different data types are 1. Numeric 2. String 3. Boolean**

1. **Numeric:- Numeric data type represent the data which has a numeric value.**
2. **Integer :- It is used with int keyword and contains integer value .**

**For ex: a=120**

**b=2435**

1. **Float:- It is used with float keyword and contains float value.**

**For ex: a=12.5**

**b=676.98**

1. **Complex number:- It is used with complex keyword and contains complex value .**

**For ex:- a= 3+2i**

**b= 5+8j**

1. **String:- String data type represent the data which has a character value.**

**It is used with the str keyword .**

**For ex: name= “Sahdev saini”**

1. **Boolean:- String data type represent the data which has a Boolean value(means either 0 and 1 , or True and false).**

**For ex:- a= 56**

**Type(a)**

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

**Ans:-**

**An expression is made up of constants , variable and operators. Expression are used to compute the value and assign to some varible.**

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

**Ans:-**

**A expression evaluates at least one value but a statement doesn’t.**

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:-** 'spam' + 'spamspam' = **spamspamsapm**

'spam' \* 3 **= spamspamspam**

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

**Ans:-**

**eggs :- eggs is valid variable because we can use only alphabet for creating a variable name .**

**100 :- we can not use only number as a variable name because complier treat it as a integer. We can use n100 as a variable name.**

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**

**Str() for string**

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

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

**Ans :- Because 99 is integer and we can’t add integer with string**