**ASSIGNMENT SUBMISSION BY HRITIK PAL**

**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.**

**\***

**'hello'**

**-87.8**

**-**

**/**

**6**

**Ans.**

\* (expression)

‘hello’ (value)

-87.8 (value)

- (expression)

/ (expression)

+ (expression)

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

**Ans.**  Variable is an element which is used to store a data type whereas string is itself a data type and is generally stored in variable.

For example x=’hritik’

Here, X is a variable and Hritik is a string or data type which is stored in variable x.

**3. Describe three different data types.**

**Ans.** Data types are the elements which are used to store data of different type at different time of usage.

Some of the data types are:-

**LIST-** List is one of the most usable data types in python language. It is used to store variety of data in square brackets([ ]) and differentiated using commas(,) in between different elements in the List. List is a mutable data type in python language.

Example of List data type is:-

X=[0,1,2,’hritik’]

**DICT-** Dict is also one of the most important data types of python language. Dict allow us to store data in key:value format and the data is stored in curly brackets({ }). Dict is a immutable data type in python language.

Example of Dict data type is:-

X={‘key’:’value’, ‘name’:’hritik’, ‘Roll no’:45}

**TUPPLE-** Tupple also plays a vital role in python language and is used in various time during different kind of projects and data extraction. Tupple store data in normal brackets i.e( ) Tupple is also immutable data type in python language.

Example of Tupple data type is:-

X=(1,2,3,’hritik)

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

**Ans.** Expression consist of Variables and operators.

Expressions are used to find an output or result for a specific query.

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

**Ans.** Expression is a type of command which is used to evaluate some code, whereas statement is a type of command which is used in execution of the code.

Example of statement, spam=10 or print(spam)

Example of expression, 300+200

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

**bacon = 22**

**bacon + 1**

**Ans.** bacon=23

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

**'spam' + 'spamspam'**

**'spam' \* 3**

**Ans.** Output for the above code is ‘spamspamspam

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

**Ans.** Egg is a valid variable name but 100 isn’t. This reason is Python doesn’t allow any numeric value to be a valid varibale to store any data type. That’s why Egg is a valid variable name but 100 isn’t.

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

**Ans.** Function used to get integer=int()

Function used to get floating-point number=float()

Function used to get string= str()

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

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

**Ans.** The above expression contains an error as 99 doesn’t have same data type as string. So in this case the correct expression will be- ‘I have eaten’ + ‘99’ + ‘burritos’.