20 May

**Python Basic - 1**

Q.1. What are keywords in python? Using the keyword library, print all the python keywords.

Keywords are words in python which are reserved for a special function and can not be used for defining new variable.

import keyword as kw

kw.kwlist

Q.2. What are the rules to create variables in python?

Must start with an alphabet

Can contain only alphabets,numbers and underscore

Keywords cant be used as variables.

Q.3. What are the standards and conventions followed for the nomenclature of variables in

python to improve code readability and maintainability?

Variables are defined in small alphabets following camel casing. Can contain numbers and underscore if required.

Q.4. What will happen if a keyword is used as a variable name?

It will throw a syntax error

Q.5. For what purpose def keyword is used?

To define a method

Q.6. What is the operation of this special character ‘\’?

division

Q.7. Give an example of the following conditions:

(i) Homogeneous list li=[1,3,4,6]

(ii) Heterogeneous set st={‘ab’,1,2.4,’cb’}

(iii) Homogeneous tuple tp=(3,6,8,1,4)

Q.8. Explain the mutable and immutable data types with proper explanation & examples.

Mutable: datatypes for which items can be altered after variable is defined. E.g. list, set.

Immutable datatypes: once defined, items under immutable datatypes cant be changed. E.g. Tuple, frozenset

Q.9. Write a code to create the given structure using only for loop.

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for i in range(5):

for j in range(i\*2-1):

print('\*',end='')

print('\r')

Q.10. Write a code to create the given structure using while loop.

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for i in range(5,0,-1):

for j in range(i\*2-1):

print('|',end='')

print('\r')