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

Answer:

import keyword

print(keyword.kwlist)

Output:

['False', 'None', 'True', 'and', 'as', 'assert', 'async', 'await', 'break', 'class', 'continue', 'def', 'del', 'elif', 'else', 'except', 'finally', 'for', 'from', 'global', 'if', 'import', 'in', 'is', 'lambda', 'nonlocal', 'not', 'or', 'pass', 'raise', 'return', 'try', 'while', 'with', 'yield']

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

Answer:

A variable should start with a character or an underscore symbol.

Variables should not start with an integer.

Variables are case sensitive.

3. What are the standards and conventions followed for the nomenclature of variables in python to improve code readability and maintainability?

Answer:

Words in the variable should be seperated by an underscore to make it readable and clear.

Variables should start with a character or an underscore.

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

Answer:

Keywords should not be used as a keyword. It shows error if we use keywords as a variable.

5. For what purpose def keyword is used?

Answer:

The keyword def is used to define or create a function.

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

Answer:

The special character backslash ‘\’ is known as escape character. It is used in \t for tab space, \n for moving to next line and \r for carriage return.

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

Answer:

Mutable datatypes are lists, dictionary and set. Immutable datatypes are tuples, boolean and string.

List – list is a mutable datatype in which elements are written within square brackets [].

[2,3,4,4,5]

Ditionary – dictionary is a mutable datatype in which elements are written within curly braces {} and they have key and value pairs.

{‘animal’:’dog’,’fruit’:’mango’}

Set – set is an unordered collection of dataitems.

{1,2,3,4}

Tuple – tuple is an immtable datatype in which elements are written within parantheses ().

(1,’str’,3,4,9)

Boolean – boolean datatypes are true and false.

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

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Answer:

n = 5

def pyramid(n):

for i in range(0, n):

for j in range(0, i+1):

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

print("\r")

pyramid(n)