Q. Explain what is variable length arguments i.e \*args & \*\*kwargs with an example of each.

* In python taking multiple arguments from the user without assigning the keyname for the arguments is called Variable Length Arguments.
* It gives flexibility to the user to give multiple arguments at the run time, and it also reduce the code complexity.
* There are two types of variable length arguments
* \*arge and \*\*kwarge.

1. **\*args:**

* It takes the indefinite number of arguments in the form of tuple. And the user can access each argument by looping and Indexing.
* It is assigned by the symbol (\*)and keyname.
* For Example:

Def add(\*args):

Sum = 0

for i in args:

sum = sum+i

return sum

add(10,2,20,30,8)

#OUTPUT : 70

1. **\*\*kwargs:**

* It takes the indefinite number of key value pair of arguments for the function. It is initialized by the symbol(\*\*)keyname to the function.
* While calling the function the arguments must be in key value pair which exactly as dictionary.
* We can use looping method to access the key-value pair of the given arguments.
* For Example:
* def fruits(\*\*kwargs):
* str1 = ''
* *for* i,j *in* kwargs.items():
* str1 = str1 + str(i) + '=' + str(j)+'\n '
* *return* str1
* print(fruits(apple=10,banana=20,orange=10))

#OUTPUT

apple=10

banana=20

orange=10