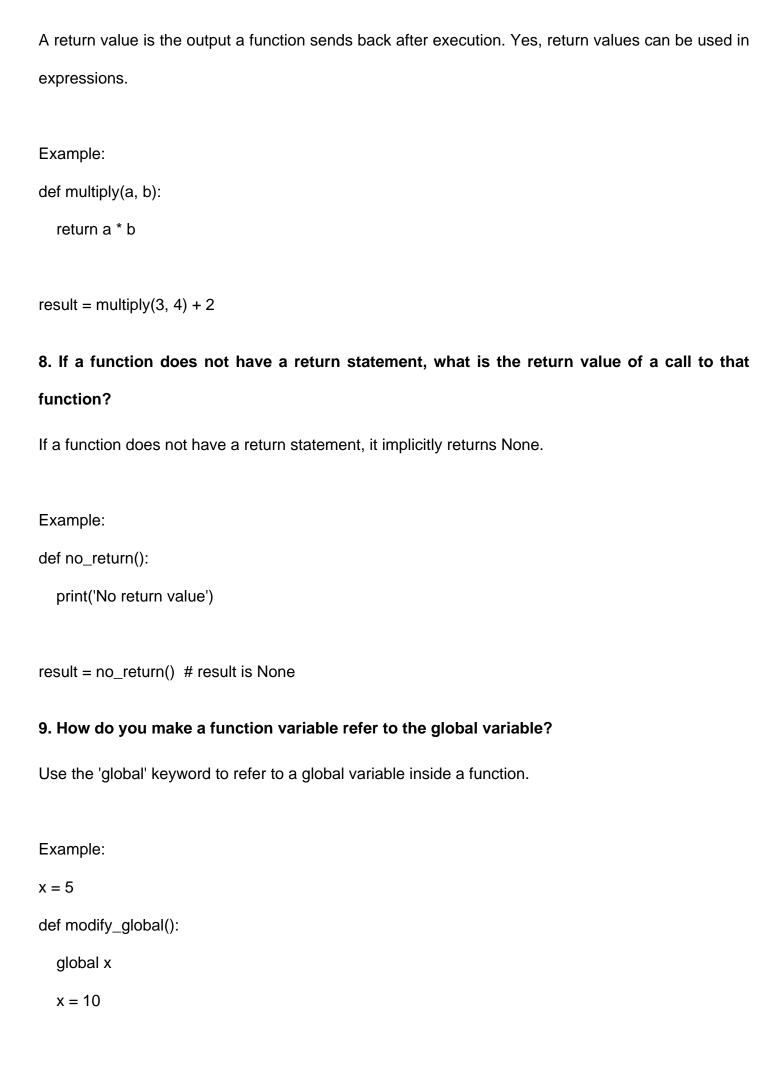
## 1. Why are functions advantageous to have in your programs?

Functions	allow	code	reusability,	improve	modularity,	reduce	redundancy,	and mak	ke programs
easier to de	ebug a	nd ma	aintain.						
Example:									
def greet():	:								
print('He	·llo!')								
# Call the f	unction	า							
greet()									
2. When d	oes th	e cod	e in a func	tion run:	when it's sp	pecified	or when it's	called?	
The code in	n a fun	ction	runs only wl	nen it is e	xplicitly calle	ed.			
Example:									
def add(a,	b):								
return a	+ b								
# Call the f	unction	า							
result = add	d(3, 5)	# Fu	nction runs	here.					
3. What sta	ateme	nt cre	ates a fund	ction?					
The 'def' st	ateme	nt crea	ates a funct	ion.					
Example:									
def my_fun	ction()	:							
print('Th	is is a	functio	on.')						

A function is a block of code defined using 'def', while a function call executes it.
Example:
def square(n):
return n * n
result = square(4) # Function is called here.
5. How many global scopes are there in a Python program? How many local scopes?
There is only one global scope in a Python program, but local scopes are created whenever a
function is called.
Example:
x = 10 # Global scope
def local_example():
y = 5 # Local scope
6. What happens to variables in a local scope when the function call returns?
Variables in a local scope are destroyed when the function call completes.
Example:
def temporary_scope():
temp = 42 # Exists only during this function call
7. What is the concept of a return value? Is it possible to have a return value in an
expression?

4. What is the difference between a function and a function call?



10. What is the data type of None?
The data type of None is NoneType.
Example:
result = None
print(type(result)) # Outputs: <class 'nonetype'=""></class>
11. What does the sentence import areallyourpetsnamederic do?
The statement imports a module named 'areallyourpetsnamederic', if it exists.
Example:
import areallyourpetsnamederic
12. If you had a bacon() feature in a spam module, what would you call it after importing
spam?
Call the bacon() function from the spam module as follows:
Example:
import spam
spam.bacon()
13. What can you do to save a programme from crashing if it encounters an error?
Use try and except blocks to handle errors and prevent crashes.
Example:
try:
result = 10 / 0

except ZeroDivisionError:
print('Cannot divide by zero.')
14. What is the purpose of the try clause? What is the purpose of the except clause?
The try clause contains the code that might raise an exception, and the except clause handles it.
Example:
try:
print(10 / 0)
except ZeroDivisionError:
print('Division by zero error.')