**Python – Assignment 3**

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| 1 | Why are functions advantageous to have in your programs? |
|  | It helps modularise using which we can avoid repetition in code. If we want the same behaviour to be repeated a number of times, then it’s convenient to make a function out of it, which can be called as many times as required. |
| 2 | When does the code in a function run: when it's specified or when it's called? |
|  | The code in the function runs when the function is called. |
| 3 | What statement creates a function? |
|  | ‘def’ statement creates a function. For example,  def func():  return 1 |
| 4 | What is the difference between a function and a function call? |
|  | A function is the piece of code that has been enclosed in a block, which can be executed whenever required, this helps avoid repetition in code. Function call is the statement which initiates the execution of the code within the function definition. |
| 5 | How many global scopes are there in a Python program? How many local scopes? |
|  | * One global scope per execution * Local scope created for every function call |
| 6 | What happens to variables in a local scope when the function call returns? |
|  | They are destroyed and the memory allotted to them is deallocated, once the function completes its execution and returns. |
| 7 | What is the concept of a return value? Is it possible to have a return value in an expression? |
|  | Return value is the result of the execution of the code in the function. Return value can be used as part of an expression. |
| 8 | If a function does not have a return statement, what is the return value of a call to that function? |
|  | The function call defaults to return None. |
| 9 | How do you make a function variable refer to the global variable? |
|  | Using global keyword in the function, can help access the global variable from within the function. |
| 10 | What is the data type of None? |
|  | NoneType |
| 11 | What does the sentence import areallyourpetsnamederic do? |
|  | This statement imports a module called areallyourpetsnamederic |
| 12 | If you had a bacon() feature in a spam module, what would you call it after importing spam? |
|  | import spam  spam.bacon() |
| 13 | What can you do to save a programme from crashing if it encounters an error? |
|  | To protect the program from crashing in case of an error, we need exception handling. In python it is implemented using try/except/finally blocks. |
| 14 | What is the purpose of the try clause? What is the purpose of the except clause? |
|  | Try and except clauses are part of Exception handling in python. The code written in the try block, is executed knowing that there might be a possibility of failure. Except block is responsible to catch the exception caused while executing the try block. This helps to not break the program execution in case of failure. |