

SIT102 – Introduction to Programming

Answers for 2.1P Hello User

Student Name: Ben Marriner

Student ID: 220253518

Question 1: Briefly explain the differences between **variables**, and **constants**? When would you use a variable? When would you use a constant?

A variable is a piece of data that can be changed while a constant cannot. You would use a variable for when you have a value that is meant to change during runtime. On the other hand, you would use a constant when you have a value that should not be changed at runtime such as a pre-defined number like Strouhal's number for instance.

Question 2: Describe **parameters**, how they work and when to use them. Explain how parameters change what you can do with functions and procedures.

Parameters are the inputs that a function will use in its code. The inputs are processed in the function's code through the instructions that the programmer gives it and it determines the output that the function returns.

Question 3: Why are **functions** called as part of an expression? Explain when you should use a function over a procedure?

You should use a function when there is a value that you want to gain using other values that you have. When you have values that you want to use to determine an output of something, like a calculation for instance, then you should use a function rather than a procedure. You really only ever use procedures when you are not looking to determine a value using the given parameters (if there are any).