# Introduction

In this report I will reflect on what experiences that I gain from completing ISYS2001 Introduction to Business Programming unit. This unit has been helps me on improving my academic knowledge about Python programming and related practices. It provides me knowledge about the subject, skills and personal growth which helps me on succeeding in my academic journey. The report will outline key aspect of the unit and how it has been important for me.

# Reflective Analysis

Before starting the unit, I was not had any experience on using Python programming. First few weeks was easy going which gives me a perfect start for the unit. But it gets tougher with the practices that had with the unit. The way lecturer interact with the student was very helpful. He always makes it clear when explaining something which helps us to understand the aspects easily. Since I never use Python programming before, I though it will be hard task for me to complete this unit. But with following each task weekly it was easy for me to understand basics and then continue what comes next.

The tutorials, lab works were very effective for me to understand theories and practice them in order to make things easy. Discussions were very effective and independent. As a student I was not afraid to ask any question from the lecturer (in class or through emails). Like every other student, I was motivated to complete this unit in an effective way. I was on the right track since start of the unit through end. After first few weeks I did some more research on Python programming which helps to understand more concepts.

# Contribution to Understanding of ISYS2001

Having weekly journal submissions on first six weeks was helps me to get a good foundation for this unit. I knew learning outcomes from those unit will help me to continue good progress on this unit as well as helps me on my future academic career. It was very helpful for me to understand basic concepts and Python and how to apply them in any given scenario. The teaching pattern as at its best and because of that I was able to understand most common aspects of the unit and how to apply them practically.

From identifying Python codes, identifying errors and make effort on how to fix them, how to create Python codes and what codes need to be apply on suitable scenarios was few key findings that helpful for us when making it a successful one. After completing this unit, I have the knowledge on how build up a Python program and how to minimize the errors that can be occur. The unit helps me to expand my knowledge about Python in various fields which I was not knew before starting the unit. I was keen to learn more things about Python and expand my knowledge through studying learning materials that we had in the unit.

# Conclusion

The Introduction to Business Programming unit has been a course module that I recommend every It related student to commenced. Because it will give the foundation on how to develop Python programs and how to apply them. As a ISYS student it is my privilege to respect and acknowledge the effort our lecturer put on us to make this unit a successful one.

# References

# Appendix

**Week 1**

It was a really good lab work. Before coming to lectures, I never heard of Google Colab and GitHub. But now I have some knowledge of how it works. Since its new to me, I did some research as well. He teaches us in a way that we can understand the things easily, it was a very interesting first week and looking forward to enjoy the lectures while doing the studies well.

Example 1:  
Heat saute pan  
Crack three eggs into bowl  
Whip eggs  
Transfer eggs to pan  
Stir eggs  
Add cheese on top  
Remove pan from heat  
Transfer eggs to plate  
Serve

Example 2:  
Choose a random winner from bunch of customers  
pick the vanilla flavour   
printing a message to a customer said that he won an ice cream

Ask from customer that if he needs cherry on top

Puts cherry on top

Make the ice cream with cherry on top

Printing the message to customer that his order coming up

**Week 2**

Week 2 lab was very effective for me. I have learned how to creates a GitHub and how to do basic things in GitHub. End of the lecture I got the opportunity to learned how to understanding an input, how to edit a program and what’s a value and how they work.

What I noticed from the lab work was we need to have a good knowledge of python in order to do coding, if one code was wrong the whole program will comes as an error. Also, more important to follow what lecturer teach in the lab work. If you miss some parts, its hard to continue rest without knowing what you missed. Hopes to continue good work in following lectures in order to get good results.

Some of the learnings from the week are,

A variable is the name given to a part of the computer’s memory, designed to store a particular data item.

6 things a computer can do

* Receive Information
* Output Information
* Perform Arithmetic
* Assign a value to a variable
* Compare to variables
* Repeat a group of actions.

**Week 3**

Week 3 was a good one with learned more about Python. The tutorial was about Function, how to use Modules and how to create functions.

**Functions:** Functions are set of codes that helps to run data as codes.

**Modules:**

Some of the key features of modules are,

* heve more functions
* It can define functions, classes and variables
* Use import keywords
* Use module name as prefix

In the lab work we learn about how to store values and perform operations in python. Values in python will be characters or may be numbers. When talk about performing operations, there are six basic computer operations

* Receive Information.
* Output information.
* Assign a value to a variable.
* Perform arithmetic.
* Compare two variables and select appropriate action.
* Repeat a group of actions.

With following the lectures regularly python programming is getting familiar and interested in learning new things. Looking forward to learn more in the lectures while doing more research.

**Week 4**

Week 4 lecture and lab work was an effective one with learning new concepts. Some of the learnings from the lecture are,

Six things that computer can do:

* Input: Some of the input devices are, keyboard/ mouse/ microphone/ camera. A computer can access different types of inputs (data and commands) from above mentioned input devices.
* Output: Examples for output devices are, monitors, printers, speakers, projectors. A computer can generate outputs from above mentioned output devices.
* Calculation: Computers can perform various operations and mathematical operations like addition, suns traction, division or even comparison between two inputs.
* Store: A computer can help to store large amount of data in storage devices like hard disk, usb, cloud storage.
* Decide: Computers can make decisions through commands given by a user.
* Repeat: Computers can perform tasks repeatedly. They are not getting tired or even not getting any errors. Their efficiency of work is very high.

Input validation code: It helps to verifies if the user supplies data.

Two main types of files

1. Text file: Text files can be readable to humans.

Eg: set of numbers or group of paragraphs.

1. Binary file: Usually they perform in binary form. Compared with text files they are complicated to understand. Some of the examples are application type data and media files (audio, video, podcast)

When completing a python code, errors may occur. After completing week 4, I have an idea of common errors that can be occur in python programs. Happy to say that I'm pretty confident now on handling errors.

**Week 5**

**Module:** A module is a file containing Python definitions and statements. They contain functions, variables and classes.

**Package:** Its a collection of modules. Modules that are related to each other are mainly put in the same package.

**Modular** **Design:** Modular design means that a complex system is broken down into smaller parts or components.

Week 5 was another very effective week, that helps to learn more complex version of python programming.  One of the most important learning from the week was how to convert a speech in to a text. A tough week compared with previous ones. But I will very curious to learn more python programming techniques while exploring more about python.

**Week 6**

**Debugging:** It’s the process of correct the bugs found during the texting. Debugging will help to identify errors and fix them efficiently.

**Types of errors:**

1. syntax errors
2. Run time errors
3. logic errors

**Types of tests:**

1. Unit test
2. Integration
3. End to end
4. Acceptance

Was a pretty hard week. Have deals with more errors compared with previous weeks. But I will try my best to continue by progress every week in order to get maximum result.