



Course Contents

- Session 1.
- Introduction to python
- Setting up the environment
- Getting familiar with IDEs and IDLEs (similarities and differences)
- First python code
- Keeping Organized
- Colours in Python
- Session assessments

- Session 2.
- Variables in Python
 - What are variables
 - Using Variables
 - Rules for Naming Python variables
 - Formatting Variable names
- Session assessment
- Take home assessments
- Session project

Session 3.

- Data Types in Python
- Strings
 - What is a string
 - Using the print function with a string
 - Displaying text on multiple lines
 - Changing the value of a string variable

- Formatting Strings
- Line Breaks
- Operators
- String Functions
- Session Assessment
- Take home assessment
- Session Project

Session 4.

- Numbers as Variables
 - Calculation with number variable
 - Number types
 - Integers
 - Floats
- Mathematical Expressions
- Order of Operations
- Session Assessment
- Take home assessment
- Session Project

Session 5.

- Lists and Boolean Expressions
 - Lists
 - List within Lists (inner List)
 - List Functions
- Boolean Expression
 - Comparison Operators
- Session Assessment
- Take home assessment
- Session Project

Session 6.

- For Loops
 - Formatting loops
 - Steps for creating loops
- Hands on examples
- Session Assessment
- Take home assessment

- Session Project

Session 7.

- While Loops and Nested loops
 - While loops
 - Infinite loops
 - Nested loops
- Hands on examples
- Session Assessment
- Take home assessment
- Session Project

Session 8.

- Conditional Statement
 - Else Statement
 - Elif
- Compound Conditional Statements
 - Logical Operators
 - Nested conditional statement
- Hands on examples
- Session Assessment
- Take home assessment
- Session Project

Session 9

- Functions
- Turtle Graphics
- Importing the module
- Additional Turtle art functions
- Parameter and Return Values
- Hands on examples
- Session Assessment
- Take home assessment
- Session Project

Session 10 – 12

- Projects

