

Python Course Curriculum

LEVEL 1

1. Understanding python in detail

- History of Python
- Sample Python projects
- Writing your first program
- Saving and opening programs
- Using comments

2. Move your turtle

- Using the turtle module- pen()
- Using the turtle module – forward(), backward(), left(), and right()
- Changing the pen size and color
- Penup() and pendown()
- Drawing circles.

3. Math and Variables

- Operators and Order of Operations
- Variables
- Revisiting the turtle with variables

4. Strings

- **Creating strings1**

- Multi-line strings
- Quotation marks inside strings
- Embedding values inside strings
- Multiplying strings
- Using the input () function
- Converting strings to numbers
- Concatenating strings

5. Reuse of code with functions and modules

- Defining a function
- Using functions
- Returning a value
- Variables and scope
- Modules

6. Conditional Statements

- If statements
- If-then-else statements
- If and elif statements
- Multiple conditions and multiple if statements

7. Loops (while, for.)

- Using for loops
 - Creating while loops
 - Nesting loops
 - Using the break command and avoiding infinite loops
8. Lists and Dictionaries.
9. Turtle again.
10. Built in functions.
11. Work with functions.
12. Project.

