

## Contents

- **Let Us Understand what is Python and Get our hands dirty with first code**
  - History of python(Only Who created Python is Imp)
  - What is Python(definition only)
  - Python Installation(not imp)
  - Python Interpreter(definition only)
  - Running first hello world program
  - Understand how print works
  
- **Data, Data everywhere. Learn to process the data**
  - Data Types
  - Variable declaration
  - Input data
  - Type(), id(), int(), str(), ord(), chr()
  - Arithmetic Operators(Operation On Negative Number is an imp Topic. Output Question)
  - Assignment Operators
  - Comparison Operators
  - Logical (or Relational) Operators
  - Identity Operators
  
- **Alter the flow of application by asking user's choice. Reduce 10 lines to 2 lines of code by not repeating the same stuff again n again**
  - if Statements
  - while construct
  - for Statements
  - The range() Function
  - break, continue, else clause
  
- **Store data in different formats and apply mathematical operations on them**
  - Lists
    - List Manipulations
    - List Comprehensions
    - reduce()
  - Tuples
  - Dictionary
  - All the Functions Used on List Tuples And Dictionary
  - Operations on data structures



- **Give a name to your block and call them whenever required [ functions ]**
  - Local variables
  - Default Argument Values
  - Returning Values
  - Keyword & Positional Arguments
  - Scope of Variables
  - global keyword
  - Mutable and Immutable Properties of passed Objects In functions
  - Recursion
  
- **Divide the application into different parts and reuse**
  - Understand what are modules
  - Create your own module
  - help(),dir()
  - Importing Modules(Diff Statements Used For importing Modules)
  - Using Built-in Math function
    - Oct(),hex(),bin(),int(),round()
  - Using Built-In String Function
    - Join(),split(),replace()
  - Using random Module
    - Random(),randint()
  
- **The Data needs to be persisted. Learn how to read and write from files**
  - Opening a File
  - Reading from a file, writing to a file
  - Closing a File(also flush())
  - Strip(),lstrip()rstrip()
  
- **Errors are common. Let us handle them**
  - try-except
  
- **Python-MYSQL connectivity**
  - Create table
  - Select
  - Insert
  - Update
  - Delete

