# **Python Crash Course**

## **Module 1**

This module describes setting up the Python environment.

## **Module 2**

This module talks about variables and data types.

Python popular statement, print(“Hello world”)

String methods,

title()

lower()

upper()

f-strings

Stripping white space,

rstrip()

lstrip()

strip()

Removing prefix

removeprefix(parameter)

removesuffixparameter)

Numbers

Python supports order of operation in expressions.

Sorting a list

sort() Sorts the list permanently in alphabetical order.

Sort(reverse = True/False) sort the list permanently in reverse order of the list.

sorted() Sorts the list temporarily in alphabetical order.

reverse() sort the list in reverse order

## **Module 3**

This module introduces the Lists.

A list is a collection of items in a particular order.

Add a new item to a list,

append() #new item add to the end of the list.

insert() #can be added to any position in the list by giving an index and value.

Removing elements from a list

**Del** statement # This will permanently remove the item; you cannot use it after it is deleted. You need to give the position of the value(index) to delete an item.

**pop()** # This will remove the last item of the list, and you can use the deleted item after it is deleted. You can delete any item if you give a position of the item in the parentheses.

**remove()** #remove the item from a list by giving item value in the parentheses.

## Module 4

This module teaches how to work in lists.

**For loop.**

Looping gives access to perform the same action or set of actions in every item in a list.

Making Numerical list

**range()** : generate a series of numbers easily.

**List()** : generate a list using range().

Simple statics with a list of numbers

min()

max()

sum()

List Comprehension

List comprehension generates a list in one line.

This combines the for loop and the creation of new elements into one line, automatically appending a new element.

Slicing a list

Working with a specific group of items in a list.

Need to give the two indexes to get the range.ex,[1:3]

Can give a third value to skip the slicing range in a specific number.

Copying a list

Make a slice, omitting the first and last index. Ex,[:]

Tuples

An immutable list called **Tuple.**

Tuple use parenthesis to create a tuple, ex: food()

A tuple can also use the index to access the element in the tuple. Food[1]

The tuple can’t be modified.

We need to redefine the entire tuple to modify the tuple.

## **Module 5**

If statement

Check the conditions in the set of code.

in Keyword: used to check a item in the list

not in keyword : used to check a item is not in the list.

## Module 2

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