**BIT 2203: OOP 2** **ASSIGNMENT 1**

**Instructions: Answer all the questions**

Explain five types of operators used in python

**Python Lists**

Introduction: https://www.w3schools.com/python/python\_lists.asp

Exercises: <https://www.w3schools.com/python/exercise.asp?filename=exercise_lists>1

1. Write a Python program to sum all the items in a list

def my\_function(food):

for x in food:

print(x)

fruits = ["apple", "banana", "cherry" , "orange" ,"kiwi" , "melon" ,"mango" , "blackcurrent"]

my\_function(fruits)

apple

banana

cherry

orange

kiwi

melon

mango

blackcurrent

1. Write a Python program to multiplies all the items in a list

**Python Strings**

Introduction: https://www.w3schools.com/python/python\_strings.asp

Exercises: <https://www.w3schools.com/python/exercise.asp?filename=exercise_strings1>

1. Explain two built-in methods for strings

Case fold () Converts string into lower case

Centre () returns a centred string

1. Write a Python program to calculate the length of a string
2. str = input("Enter a string: ")
3. # counter variable to count the character in a string
4. counter = 0
5. for s in str:
6. counter = counter+1
7. print("Length of the input string is:", counter)

Enter a string: my name is milkah

Length of the input string is: 17

**Python Dictionaries**

Introduction: https://www.w3schools.com/python/python\_dictionaries.asp

Exercises: https://www.w3schools.com/python/exercise.asp?filename=exercise\_dictionaries1 a) Define a dictionary as used in Python programming

A dictionary is a collection which is unordered, changeable and indexed. In Python dictionaries are written with curly brackets, and they have keys and values.

1. List 5 dictionary methods

|  |  |
| --- | --- |
| Python Dictionary clear() | Removes all Items |
| Python Dictionary copy() | Returns Shallow Copy of a Dictionary |
| Python Dictionary fromkeys() | creates dictionary from given sequence |
| Python Dictionary get() | Returns Value of The Key |
| Python Dictionary items() | returns view of dictionary's (key, value) pair |

1. Create a dictionary named *students* with the following information

FisrtName Your name

LastName Your last name

Reg\_number Bscit-01-

050/2018

PhoneNumber 0700123456

thisdict = {

"firstName": "milkah",

"lastName": "wangui",

"reg\_number":"bscit-01-0418/19",

"phonenumber" :"0741844630"

}

print(thisdict)

{'firstName': 'milkah', 'lastName': 'wangui', 'reg\_number': 'bscit-01-0418/19', 'phonenumber': '0741844630'}