# Mutable And Immutable Data Types

Lamptey Joshua Nii Odartei Benjamin Ofori Moses Kukubor Julius Avinu-Blaboe David Ayamba

January 30, 2024

# Mutable Data Types

**Mutable data types** are that which can be changed; simply put you can make changes to its content.

You can directly alter the contents stored in data: type variable.

Example: list dictionaries sets and user define data classes.

#### Code Demonstration

```
creating a list called items
items = ['apples','toys','shoes','undergarment']
print(items)
print(id(items))
items [3] = 'devices'
print(items)
print(id(items))
```

### Immutable Data Types

**Immutable data types** are the type which cant be changed ;simply can't make direct changes to the values stored in the variable of the specified data type.

that is items assigned to a specific memory location cant be changed. example :int, float ,decimal, bool,string tuple range etc .

### Code Demonstration

```
creating a tuple called items
items = ('apples','toys','shoes','undergarment')
print(items)
print(id(items))
items [3] = 'devices'
print(items)
print(id(items))
```