

**FACULTY OF ENGINEERING**

**COURSE UNIT: COMPUTER PROGRAMMING**

# LECTURER: Mr. MASERUKA BENEDICTO

**SUBMITTED BY GROUP G**

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**Date of submission…. /……/…….**

|  |  |  |  |
| --- | --- | --- | --- |
| STUDENT NAME | REG NO | COURSE | GITHUB LINK |
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| Namuwawu Patricia | BU/UG/2024/2670 | APE | https://github.com/namuwawu20/Namuwawu-Patricia-.git |
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| Nyemera Anna Grace | BU/UP/2024/0838 | AMI | https://github.com/Nyemera-maker/Nyemera-Anna-Grace-.git |
| Kintu Gadafi | BU/UP/2024/3734 | AMI | https://github.com/kintugadafi4/Kintugadafi4- |
| Kitutu Leonard | BU/UP/2024/1035 | WAR | https://github.com/leonardkitutu1-hue/leonard-kitutu.git |
| BASALIRWA ROBERT | BU/UP/2024/1004 | WAR | https://github.com/basalirwarobert08/BASALIRWA-ROBERT-.git |
| BARASA ELVIS | BU/UP/2024/3817 | AMI | https://github.com/barasaelvis/-BARASA-ELVIS-.git. |
| ABUROT MARTHA | BU/UP/2024/3823 | WAR | https://github.com/martha-ab/Aburot-Martha-.git. |
| MUTEBE JOEL | BU/UP/2024/1043 | WAR | https://github.com/MUTEBE3/MUTEBE-JOEL. |
| Atyang Mildred | BU/UP/2024/1019 | WAR | https://github.com/mildredmoreen/ATYANG-MILDRED-.git |
| Bravo Gift | BU/UG/2024/5059 | PTI | https://github.com/bravogift7-svg |
| ACHENG AUDREY LORNA | BU/UP/2024/0986 | AMI | https://github.com/audreyacheng253-audrey/Acheng-Audrey-Lorna.git |
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GROUP G MEMBERS

**DECLARATION**

We GROUP G, hereby declare that the information contained here is to best of our knowledge Therefore, it has never been submitted to any institution for any award.

GROUP LEADER NAME:………………………….

GROUP: G

DATE………………………………………………………………………………….

SIGNATURE………………………………………………………………………….

**ACKNOWLEDGEMENT**

We first of all thank GOD for endlessly supporting us from the start of the assignment up to the point of accomplishment and we pray that He continuously supports us to the end.

Special appreciation and great thanks to all the group members for making it for the discussions

APPROVAL

This is to confirm that this report has been written and presented by GROUP G, giving the details of the first matlab assignment and what we learnt.

LECTURER;

NAME: …………………………………………………………………….

SIGNATURE: …………………………………………………………....

DATE: …………………………………………………………………….

DEDICATION

We dedicate this report to our parents**,** Friends, for their tireless efforts and sacrificial support. Thank you so much.

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## CHAPTER ONE: INTRODUCTION

## Introduction

In this document, we will explore the how to import data from an excel file from Kaggle.com using MATLAB. The primary objective is to create tables and converting them into structural arrays.

## Key Concepts

* Readtable
* Create tables
* Converting tables into structural arrays
* Exporting data

## Code Structure

The MATLAB code will consist of the following components:

* Definition of the data.
* Construction of the codes

# TASKS

1. Retrieve a unique data set from Kaggle . com in excel format. The group will read the dataset in one code. They will be able to copy variables of each year and put them in the following;
2. Tables for each year of data
3. Covert the table in one above into structural arrays
4. Output each of the variables in ii above into an excel workbook with each year on separate sheets having clear column headings and sheet names
5. Each group has different members from different backgrounds, tribes, districts, courses, interests, ages, names and facial recognition write a code that can store each members affirmation attributes into a single file. ensure the code saves the variables in Report format and power point representation.

**CHAPTER TWO: Question One**

We retrieved a unique data set from Kaggle . com in excel format. The group read the dataset in one code and was able to copy variables of each year and put them in the following;

* Tables for each year of data
* Covert the table in one above into structural arrays
* Output each of the variables in ii above into an excel workbook with each year on separate sheets having clear column headings and sheet names

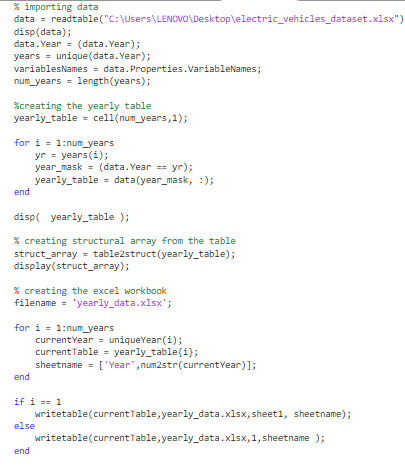
Key Functions

**Readtable**:

data= readtable([filename](https://www.mathworks.com/help/matlab/ref/readtable.html#mw_b0826a11-ea6e-45f6-92ce-54960958581f)) creates a table by reading column-oriented data from a text file, spreadsheet

* **Create table**:

**Code structure**



**CHAPTER THREE: QUESTION TWO**

**Introduction**

The task given was for each group to write a code that can store each members affirmation attributes into a single file and ensure the code saves the variables.

Members were therefore requested to provide their data i.e. tribes, districts, courses, interests, ages, names and facial recognition

**CODE STRUCTURE**

%% defining struct

member=struct('Name',{},'Age',{},'Course',{},'Homedistrict',{},'Tribe',{},'Facialrepresentation',{},'Interest',{});

%member(1)

member(1).Name='Namuwawupatricia';

member(1).Age=21;

member(1).Course='APE';

member(1).Homedistrict='Masaka';

member(1).Tribe='Muganda';

member(1).Facialrepresentation=imread('ngc6543a.jpg');

member(1).Interest='football';

member(2).Name='Nasasiraaustine';

member(2).Age=22;

member(2).Course='WAR';

member(2).Homedistrict='Bushenyi';

member(2).Tribe='Munyankole';

member(2).Facialrepresentation=imread('ngc6543a.jpg');

member(2).Interest='football';

member(3).Name='Mugumemathia';

member(3).Age=22;

member(3).Course='MEB';

member(3).Homedistrict='BUSHENYI';

member(3).Tribe='Munyankole';

member(3).Facialrepresentation=imread('ngc6543a.jpg');

member(3).Interest='volleyball';

member(4).Name='Mutebejoel';

member(4).Age=22;

member(4).Course='WAR';

member(4).Homedistrict='Mbale';

member(4).Tribe='Mugwere';

member(4).Facialrepresentation=imread('ngc6543a.jpg');

member(4).Interest='football';

member(5).Name='Ainamatsikojeremy';

member(5).Age=21;

member(5).Course='WAR';

member(5).Homedistrict='Kazo';

member(5).Tribe='Munyankole';

member(5).Facialrepresentation=imread('ngc6543a.jpg');

member(5).Interest='volleyball';

member(6).Name='Kitutuleonard';

member(6).Age=21;

member(6).Course='WAR';

member(6).Homedistrict='Situmi';

member(6).Tribe='Mugishu';

member(6).Facialrepresentation=imread('ngc6543a.jpg');

member(6).Interest='Rugby';

member(7).Name='Bravogift';

member(7).Age=21;

member(7).Course='Pti';

member(7).Homedistrict='Pakwach';

member(7).Tribe='Alur';

member(7).Facialrepresentation=imread('ngc6543a.jpg');

member(7).Interest='football';

member(8).Name='Aburotmartha';

member(8).Age=26;

member(8).Course='WAR';

member(8).Homedistrict='Amuria';

member(8).Tribe='Itesot';

member(8).Facialrepresentation=imread('ngc6543a.jpg');

member(8).Interest='Singing';

member(9).Name='Achengeaudreylorna';

member(9).Age=21;

member(9).Course='AMI';

member(9).Homedistrict='Soroti';

member(9).Tribe='Langi';

member(9).Facialrepresentation=imread('ngc6543a.jpg');

member(9).Interest='Trips';

member(10).Name='Omonapatrick';

member(10).Age=20;

member(10).Course='MEB';

member(10).Homedistrict='Kitgum';

member(10).Tribe='Acholi';

member(10).Facialrepresentation=imread('ngc6543a.jpg');

member(10).Interest='football';

member(11).Name='BasalirwaRobert';

member(11).Age=23;

member(11).Course='WAR';

member(11).Homedistrict='Mayuge';

member(11).Tribe='Musoga';

member(11).Facialrepresentation=imread('ngc6543a.jpg');

member(11).Interest='football';

member(12).Name='Mildredatyang';

member(12).Age=23;

member(12).Course='WAR';

member(12).Homedistrict='Tororo';

member(12).Tribe='Mugisu';

member(12).Facialrepresentation=imread('ngc6543a.jpg');

member(12).Interest='netball';

member(13).Name='Kintugadaffi';

member(13).Age=22;

member(13).Course='AMI';

member(13).Homedistrict='Mityana';

member(13).Tribe='Muganda';

member(13).Facialrepresentation=imread('ngc6543a.jpg');

member(13).Interest='Movies';

member(14).Name='Barasaelvis';

member(14).Age=23;

member(14).Course='AMI';

member(14).Homedistrict='Busia';

member(14).Tribe='Samia';

member(14).Facialrepresentation=imread('ngc6543a.jpg');

member(14).Interest='Music';

member(15).Name='NyemeraAnnaGrace';

member(15).Age=22;

member(15).Course='AMI';

member(15).Homedistrict='Butebo';

member(15).Tribe='Itesot';

member(15).Facialrepresentation=imread('ngc6543a.jpg');

member(15).Interest='Travelling';

member(16).Name='OkwiNicholas';

member(16).Age=23;

member(16).Course='WAR';

member(16).Homedistrict='Bukedea';

member(16).Tribe='Itesot';

member(16).Facialrepresentation=imread('ngc6543a.jpg');

member(16).Interest='Music';