

FACULTY OF ENGINNEERING AND TECHNOLOGY

**REPORT ABOUT COMPUTER PROGRAMMING ASSIGNMENT ONE**

BY: GROUP E

COURSE UNIT: COMPUTER PROGRAMMING

GROUP LINK. https://github.com/Groupematlab/group-E.git

**This assignment report is submitted to the lecturer of computer programming Mr. BENEDICTO MASERUKA by group E.**

**Submitted on…/……/……….**

**GROUP MEMBER’S DETAILS**

|  |  |  |
| --- | --- | --- |
| NAME | REG. NUMBER | COURSE |
| 1. NAMARA ROMUS | BU/UG/2024/2596 | WAR |
| 2. SEMBERA SHERINA TAPINESS | BU/UP/2024/5349 | MEB |
| 3. BIIRA EDITOR | BU/UG/2024/5058 | WAR |
| 4. ADIKINI BEATRICE | BU/UP/2024/4090 | WAR |
| 5. ABONGO CHRISTOPHER | BU/UP/2024/1002 | WAR |
| 6. MUGANYIZI JAMES | BU/UP/2024/0831 | AMI |
| 7. KANYANGE SHEEBAH M | BU/UG/2024/2630 | MEB |
| 8. APIO MARY GRACE | BU/UP/2024/3247 | WAR |
| 9. ATIM SARAH | BU/UP/2024/5473 | WAR |
| 10. ARIONGET SHAMIM EGONU | BU/UG/2024/2589 | WAR |
| 11. NUWAMANYA MUGISHA EVANS | BU/UP/2024/0877 | APE |
| 12. NAMWANJE SAMALE | BU/UP/2024/3821 | PTI |
| 13. OTIM INNOCENT LEMO | BU/UP/2024/3257 | WAR |
| 14. NYERO MARIA ASUMPTA | BU/UP/2024/1053 | WAR |
| 15. MUHAIRWE VICTOR | BU/UP/2024/5254 | AMI |
| 16. KAKOOZA IAN MAURICE | BU/UP/2024/4324 | AMI |
| 17. OBUA LOUIS | BU/UP/2024/0839 | AMI |

# ABSTRACT

This report is about the assignment which was given to all groups in computer programming including our group E on September 4, 2025. We started with further research on addition to the knowledge which was given to us by our lecturer. We managed to succeed with the assignment by generating right codes that are matching to the assignment given.

# 

# ACKNOWLEDGEMENT

We first of all thank GOD for the gift of understanding and unity among our group members from the start of the assignment to the point of accomplishment.

In addition, great thanks go to the lecturer for the teaching method he used to make us understand more techniques in MATLAB through giving us this assignment.

Lastly, we also appreciate each member for the support in researching and documenting the results of this assignment.

# 

# DECLARATION

We, members of group E, sincerely declare this report to all members who may need to use its content for approval or study. This is out of our own knowledge and research and is the content of our own writing covering.

Date of declaration…………………………………………………………………………

Group representative signature………………………………………………………………

# 

# APPROVAL

This is to confirm that this report has been written and presented by GROUP E giving the details for the assignment.

**LECTURER’S** **NAME:** …………………………………………………………

**SIGNITURE:** ………………………………………………………………………

**DATE**: ………………………………………………………………………………

TAContents

[ABSTRACT i](#_Toc208402900)

[ACKNOWLEDGEMENT i](#_Toc208402901)

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[1.0 CHAPTER ONE; ii](#_Toc208402904)

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[SOLUTION. ii](#_Toc208402906)

[2.0 CHAPTER TWO; 1](#_Toc208402907)

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# 1.0 CHAPTER ONE;

# 1.1 NUMBER ONE

Qn. There is a site called kaggle.com on the website. Each group should be able to retrieve a unique dataset in excel format. The group will be able to copy the variables of each year and put them in the following;

1. Tables for each year of data
2. Convert the tables in (i). above into structural arrays
3. Output each of the variables in (ii) above into a single workbook with each year on a separate sheet having clear column headings and sheet names.

## SOLUTION.

We downloaded the document called world population from kaggle.com and it was in CSV form. We changed it into excel format and saved in a new directory on the PC.

We opened MATLAB and read the table in excel format using the *readtable* command as follows;

groupe = readtable("C:\Users\Sober\Desktop\matlab assignment\world\_population.xlsx",Range="A1:L12",ReadVariableName=true);

%T = 2022

T = groupe(:,1:6);

%E = 2020

E = groupe(:,[1,2,3,4,5,7]);

%R = 2015

R = groupe(:,[1,2,3,4,5,8]);

%N = 2010

N = groupe(:,[1,2,3,4,5,9]);

%V = 2000

V = groupe(:,[1,2,3,4,5,10]);

%A = 1990

A = groupe(:,[1,2,3,4,5,11]);

%K = 1980

K = groupe(:,[1,2,3,4,5,12]);

%TS = structurearray T

TS = table2struct(T);

%ES = structurearray E

ES = table2struct(E);

%RS = structurearray R

RS = table2struct(R);

%NS = structurearray N

NS = table2struct(N);

%VS = structurearray V

VS = table2struct(V);

%AS = structurearray A

AS = table2struct(A);

%KS = structurearray K

KS = table2struct(K);

%ST = structure to table of TS

ST = struct2table(TS);

%sheetone = 2022

writetable(ST,'C:\Users\Sober\Desktop\matlab assignment\sheetone.xlsx');

%SE = structure of table ES

SE = struct2table(ES);

%sheettwo = 2020

writetable(SE,'C:\Users\Sober\Desktop\matlab assignment\sheettwo.xlsx');

%SR = structure of table RS

SR = struct2table(RS);

%sheetthree = 2015

writetable(SR,'C:\Users\Sober\Desktop\matlab assignment\sheetthree.xlsx');

%SN = structure to table of NS

SN = struct2table(NS);

%sheetfour = 2010

writetable(SN,'C:\Users\Sober\Desktop\matlab assignment\sheetfour.xlsx');

%SV = structure of table VS

SV = struct2table(VS);

%sheetfive = 2000

writetable(SV,'C:\Users\Sober\Desktop\matlab assignment\sheetfive.xlsx');

%SA = structure of table AS

SA = struct2table(AS);

%sheetsix = 1990

writetable(SA,'C:\Users\Sober\Desktop\matlab assignment\sheetsix.xlsx');

%SK = structure of table KS

SK = struct2table(KS);

%sheetseven = 1980

writetable(SK,'C:\Users\Sober\Desktop\matlab assignment\sheetseven.xlsx');

# 2.0 CHAPTER TWO;

# 2.1 QUESTION TWO

%%Defining struct

Members = struct ('Name',{},'Age',{},'Religion',{},'Course',{},'Tribe',{},'Background',{},'Interests',{},'HomeDistrict',{},'Village',{},'FacialRepresentation',{});

% Member 1

Members(1).Name = 'ARIONGET SHAMIM EGONU';

Members(1).Age = '25';

Members(1).Religion = 'ISLAM';

Members(1).Course = 'WAR';

Members(1).Tribe = 'ITESOT';

Members(1).Background = 'HUMBLE';

Members(1).Interests = 'SINGING';

Members(1).HomeDistrict = 'AMURIA';

Members(1).Village = 'AKISIM';

Members(1).FacialRepresentation = imread ('H:\IMG-20240705-WA0098.jpg');

% Member 2

Members(2).Name = 'KANYANGE SHEEBAH M';

Members(2).Age = '22';

Members(2).Religion = 'ISLAM';

Members(2).Course = 'MEB';

Members(2).Tribe = 'MUGANDA';

Members(2).Background = 'HUMBLE';

Members(2).Interests = 'LISTENING TO MUSIC';

Members(2).HomeDistrict = 'WAKISO';

Members(2).Village = 'WAKISO';

Members(2).FacialRepresentation = imread ('H:\IMG-20250330-WA0315.jpg');

% Member 3

Members(3).Name = 'BIIRA EDITOR';

Members(3).Age = '25';

Members(3).Religion = 'ANGLICAN';

Members(3).Course = 'WAR';

Members(3).Tribe = 'MUKONZO';

Members(3).Background = 'HUMBLE';

Members(3).Interests = 'DANCING';

Members(3).HomeDistrict = 'KASESE';

Members(3).Village = 'KAMASASA';

Members(3).FacialRepresentation = imread ('H:\IMG-20250908-WA0022.jpg');

% Member 4

Members(4).Name = 'MUGANYIZI JAMES FACTOR';

Members(4).Age = '23';

Members(4).Religion = 'CATHOLIC';

Members(4).Course = 'AMI';

Members(4).Tribe = 'MUNYORO';

Members(4).Background = 'HUMBLE';

Members(4).Interests = 'GAMING';

Members(4).HomeDistrict = 'HOIMA';

Members(4).Village = 'HOIMA';

Members(4).FacialRepresentation = imread ('H:\IMG-20250910-WA0011.jpg');

% Member 5

Members(5).Name = 'ATIM SARAH';

Members(5).Age = '23';

Members(5).Religion = 'ANGLICAN';

Members(5).Course = 'WAR';

Members(5).Tribe = 'ITESOT';

Members(5).Background = 'MORALLY UPRIGHT';

Members(5).Interests = 'INFLUENTIAL';

Members(5).HomeDistrict = 'SOROTI';

Members(5).Village = 'AKISIM';

Members(5).FacialRepresentation = imread ('H:\IMG-20250909-WA0034\_043657.jpg');

% Member 6

Members(6).Name = 'MUHAIRWE VICTOR';

Members(6).Age = '22';

Members(6).Religion = 'CATHOLIC';

Members(6).Course = 'AMI';

Members(6).Tribe = 'MUTOORO';

Members(6).Background = 'HUMBLE';

Members(6).Interests = 'DESIGNING';

Members(6).HomeDistrict = 'KABAROLE';

Members(6).Village = 'KIJURA';

Members(6).FacialRepresentation = imread ('H:\IMG-20250908-WA0019.jpg');

% Member 7

Members(7).Name = 'NYERO MARIA ASUMPTA';

Members(7).Age = '22';

Members(7).Religion = 'CATHOLIC';

Members(7).Course = 'WAR';

Members(7).Tribe = 'LANGI';

Members(7).Background = 'PK';

Members(7).Interests = 'SWIMMING';

Members(7).HomeDistrict = 'LIRA';

Members(7).Village = 'NGETTA';

Members(7).FacialRepresentation = imread ('H:\IMG-20250907-WA0004.jpg');

% Member 8

Members(8).Name = 'OBUA LOUIS';

Members(8).Age = '22';

Members(8).Religion = 'CATHOLIC';

Members(8).Course = 'AMI';

Members(8).Tribe = 'LANGI';

Members(8).Background = 'HUMBLE';

Members(8).Interests = 'VOLLEYBALL';

Members(8).HomeDistrict = 'LIRA';

Members(8).Village = 'SENIOR QUARTERS';

Members(8).FacialRepresentation = imread ('H:\IMG-20250909-WA0012.jpg');

% Member 9

Members(9).Name = 'ABONGO CHRISTOPHER';

Members(9).Age = '23';

Members(9).Religion = 'CATHOLIC';

Members(9).Course = 'WAR';

Members(9).Tribe = 'LANGI';

Members(9).Background = 'HUMBLE';

Members(9).Interests = 'INDOOR GAMES';

Members(9).HomeDistrict = 'LIRA';

Members(9).Village = 'SENIOR QUARTERS';

Members(9).FacialRepresentation = imread ('H:\IMG-20250908-WA0017.jpg');

% Member 10

Members(10).Name = 'NAMARA ROMUS';

Members(10).Age = '23';

Members(10).Religion = 'SDA';

Members(10).Course = 'WAR';

Members(10).Tribe = 'MUNYORO';

Members(10).Background = 'HUMBLE';

Members(10).Interests = 'CURIOSITY';

Members(10).HomeDistrict = 'KAGADI';

Members(10).Village = 'BWARANDA A';

Members(10).FacialRepresentation = imread ('H:\IMG-20250908-WA0015.jpg');

% Member 11

Members(11).Name = 'ADIKINI BEATRICE';

Members(11).Age = '29';

Members(11).Religion = 'CATHOLIC';

Members(11).Course = 'WAR';

Members(11).Tribe = 'JAPADHOLA';

Members(11).Background = 'HUMBLE';

Members(11).Interests = 'GAMES AND SPORTS';

Members(11).HomeDistrict = 'TORORO';

Members(11).Village = 'SENIOR QUARTERS';

Members(11).FacialRepresentation = imread ('H:\IMG-20250908-WA0016.jpg');

% Member 12

Members(12).Name = 'APIO MARY GRACE';

Members(12).Age = '24';

Members(12).Religion = 'CATHOLIC';

Members(12).Course = 'WAR';

Members(12).Tribe = 'LANGI';

Members(12).Background = 'HUMBLE';

Members(12).Interests = 'WATCHING MOVIES';

Members(12).HomeDistrict = 'LIRA';

Members(12).Village = 'SENIOR QUARTERS';

Members(12).FacialRepresentation = imread ('H:\IMG-20250908-WA0024.jpg');

% Member 13

Members(13).Name = 'OTIM INNOCENT LEMO';

Members(13).Age = '23';

Members(13).Religion = 'CATHOLIC';

Members(13).Course = 'WAR';

Members(13).Tribe = 'LANGI';

Members(13).Background = 'HUMBLE';

Members(13).Interests = 'FOOTBALL';

Members(13).HomeDistrict = 'LIRA';

Members(13).Village = 'SENIOR QUARTERS';

Members(13).FacialRepresentation = imread ('H:\IMG-20250909-WA0011.jpg');

% Member 14

Members(14).Name = 'NAMWANJE SAMALE';

Members(14).Age = '21';

Members(14).Religion = 'ANGLICAN';

Members(14).Course = 'PTI';

Members(14).Tribe = 'MUGANDA';

Members(14).Background = 'HUMBLE';

Members(14).Interests = 'DANCING & MOVIES';

Members(14).HomeDistrict = 'LUWEERO';

Members(14).Village = 'LUWEERO';

Members(14).FacialRepresentation = imread ('H:\IMG-20250907-WA0007.jpg');

% Member 15

Members(15).Name = 'SEMBERA SHERINA TAPINESS';

Members(15).Age = '21';

Members(15).Religion = 'ANGLICAN';

Members(15).Course = 'MEB';

Members(15).Tribe = 'MUSOGA';

Members(15).Background = 'HUMBLE';

Members(15).Interests = 'EATING';

Members(15).HomeDistrict = 'JINJA';

Members(15).Village = 'JINJA';

Members(15).FacialRepresentation = imread ('H:\IMG-20250907-WA0005.jpg');

% Member 16

Members(16).Name = 'KAKOOZA IAN MAURICE';

Members(16).Age = '23';

Members(16).Religion = 'CATHOLIC';

Members(16).Course = 'AMI';

Members(16).Tribe = 'MUGANDA';

Members(16).Background = 'HUMBLE';

Members(16).Interests = 'GAMING';

Members(16).HomeDistrict = 'JINJA';

Members(16).Village = 'JINJA';

Members(16).FacialRepresentation = imread ('H:\IMG-20250908-WA0017.jpg');

% Member 17

Members(17).Name = 'NUWAMANYA MUGISHA EVANS';

Members(17).Age = '23';

Members(17).Religion = 'ANGLICAN';

Members(17).Course = 'APE';

Members(17).Tribe = 'MUKIGA';

Members(17).Background = 'LOVE!';

Members(17).Interests = 'DEBATE';

Members(17).HomeDistrict = 'KAMWENGE';

Members(17).Village = 'KAHUNGE';

Members(17).FacialRepresentation = imread ('H:\IMG-20250909-WA0010.jpg');