

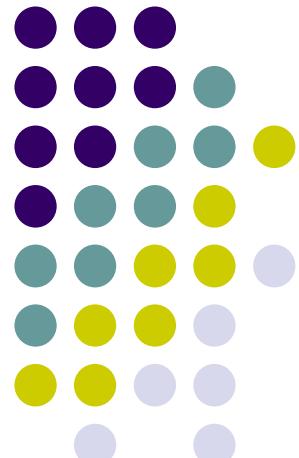


*Break chains, visible or invisible -  
build up from ruins, personal or social.*

# Digital Logic Design

**FRANTZ FANON UNIVERSITY**  
**COLLAGE OF COMPUTING AND IT**  
**DEPARTMENT OF ICT**

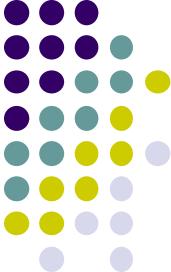
**Suleiman Gargaare**



MSc in Computer Science, MSc in Project Management & BSc in  
Information Technology.

Lecturer

[suleiman.gargaare@gmail.com](mailto:suleiman.gargaare@gmail.com)



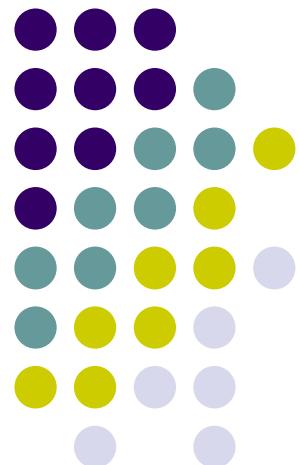
# Course Contents

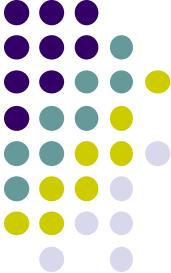
- Chapter 1 - Number Systems
- Chapter 2 - Binary Arithmetic
- Chapter 3 - Logic Gates
- Chapter 4 - Boolean Algebra
- Chapter 5 – K-Map

# Digital Logic Design

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Chapter 5 – Karnaugh Map



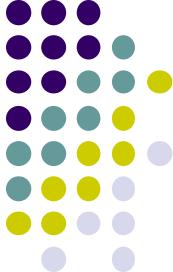


# Assignment (25%)



# Presentation & Discussion

**WHAT'S THE PRESENTATION WILL ALL  
ABOUT IT**



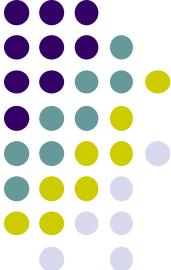
## Karnaugh Map

- ✓ Brief History of K-Map
- ✓ How K-Map Works with Examples
- ✓ Explain Construction, Grouping, Solution, Inverse & Don't cares in K-Map.
- ✓ 2 Variable K-Map



## GRADING & EVALUATION OF ASSIGNMENT

- The Presentation Document will be graded **10%** out of 25%.
- The way of explanation and presenting the PPT document will be graded **10%** out of 25%.
- The remaining **5%** will be how the group will answer the questions from the Lecturer and the audiences.
- The total Marks of this assignment is **25%**



## SCHEDULE & PLAN OF THE PRESENTATION

- ❑ The class will be divided into **Six Groups**. Each group will have a maximum of **Six students**.
- ❑ The first three groups will be presenting on **Wednesday, April 6**.
- ❑ The remaining three groups will be presenting on **Thursday, April 7**.
- ❑ Each group will have **25 minutes** of Presentation and **5 more minutes** of Question and Answering.
- ❑ The number of **Presenters** will be on **2 students** the remaining **3 students** will be answered the questions.
- ❑ Each student must be in the class.



# AFTERNOON CLASS: - Grouping

## Group One

1. Abdiasiis Bashe Mohamed
2. Abdifatah Mahamed Imaan
3. Ahmed Abdi Maxamed
4. Amin Bacood Abdillahi
5. Amina Mohamoud Ali

## Group Two

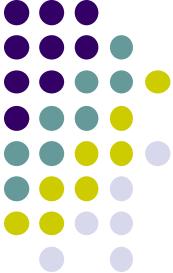
1. Awo Ali Abdi
2. Barwaaqo Sahal Ali
3. Fathi Mouse Hussein
4. Ibrahim Ali Jama
5. Jamal Muuse Muxumed

## Group Three

1. Jimcaale Baashe Galiixe
2. Kalthum Awil Egeh
3. Khadar Adan Maxmed
4. Maxamed Jaamac Ali
5. Marwo Mohamed Hussein

## Group Four

1. Mohamed Adan Abdilahi
2. Mohamed Abdirashid Abdi
3. Mohamed Jamac Ali
4. Mohamed Mawlid Osman
5. Muhiyadin Omer Abdi



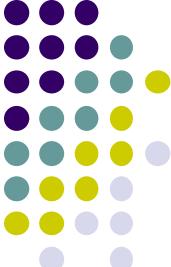
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## **Group Five**

1. Nacima Mohamed Adan
2. Nimco Mohamud Iidan
3. Najma Cawil Cige
4. Omer Hirsi Jama
5. Ridwaana Nuur Abdillahi
6. Samiira Yuusuf Ibrahim

## **Group Six**

1. Samsam Aadan Cabdi
2. Umalkhair Abdirahman Osman
3. Xamse Ahmed Nuux
4. Xamse Xasan Diiriye
5. Zamiira Yusuf Ibraahim
6. Zamzam Adan Abdi



# EVENING CLASS: - Grouping

## Group One

1. Abdihakiim Ali Ahmed
2. Abdikani Qorane Osman
3. Abdikani Omer Ahmed
4. Abdillahi Dahir Moumin
5. Abdinasir Idiris Mohamed
6. Abdimajid Ahmed Adan

## Group Two

1. Abdirahim Ahmed Osman
2. Abdishakur Ahmed Mohamud
3. Abdirisaq Ahmed Abdi
4. Abdiwadud Mohamed Dahir
5. Abshir Ahmed Abdi
6. Abubakar Khadar Ali

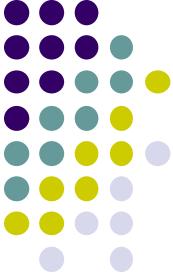
## Group Three

1. Ayan Ibrahim Ahmed
2. Ayuub Ahmed Kabadhe
3. Deeqa Yuusuf Jamac
4. Hibo Jaamac Ciid
5. Hamse Abdi Mohamed
6. Hiis Abdirahman Salaad

## Group Four

1. Jama Abdillahi Ali
2. Khadar Abdillahi Ali
3. Khalid Abdiqariim Jama
4. Khalid Adam Hassan
5. Khalif Ahmed Kahin
6. Liban Harir Jama

Cont..



## **Group Five**

1. Mohamed Abdishakur Hassan
2. Muhiyadin Ahmed Ibrahim
3. Mukhtar Ahmed Yusuf
4. Nicima Ahmed Maax
5. Saed Mahad Warsame

## **Group Six**

1. Saed Mohamed Arab
2. Subeer Ali Ahmed
3. Suber Mohamed Ali
4. Suhayb Abdirahman Mohamed
5. Wardi Hasan Abdi



# The End