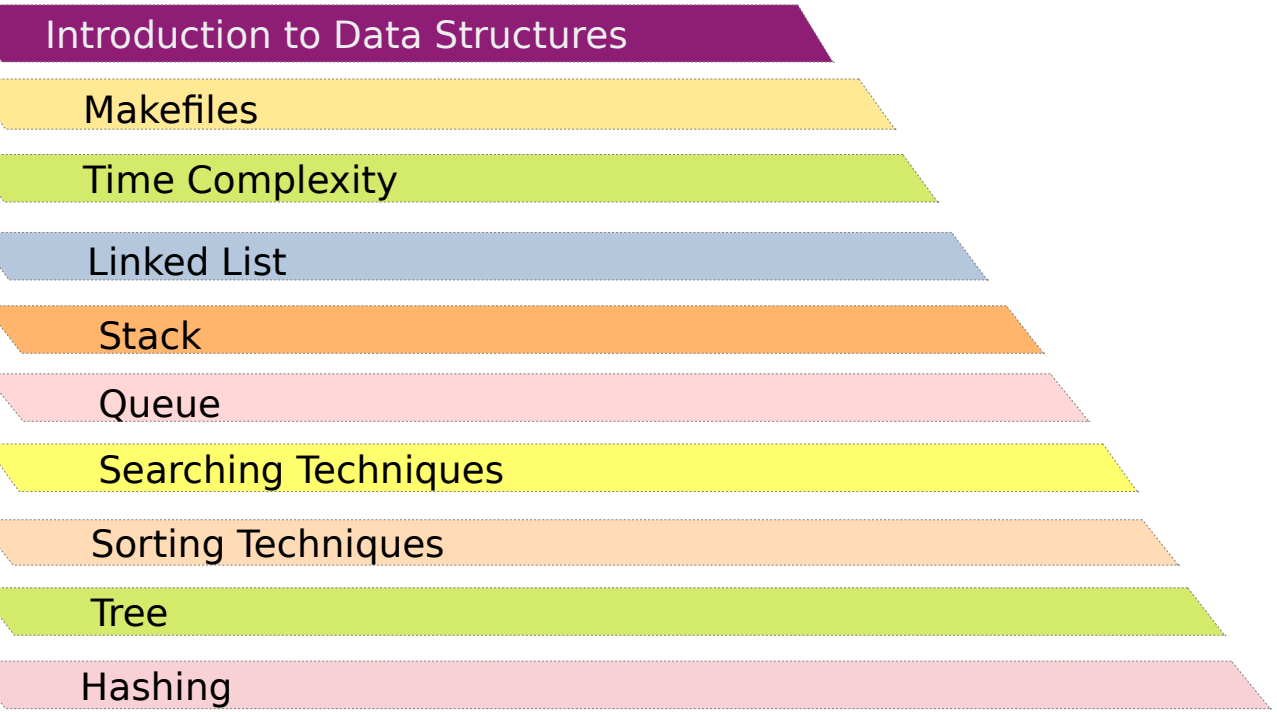
Data Structures

CODE
FORTHINGS

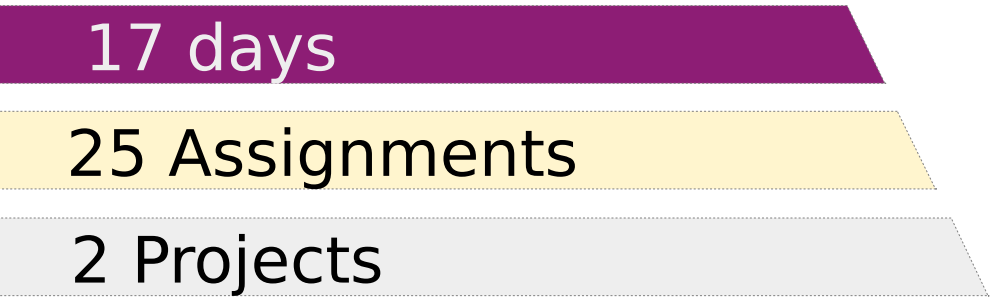
Data Structure

Overview of module



Data Structure

Introduction



Introduction to Data Structures

Data Structure

Introduction

Data Structure

Introduction

What?

Why?

Where?

What?

What?

Case 1: Mr A Lazy

What?

Case 1: Mr A Lazy

Case 2: Mr B Active

What?

Clothes

Mobile Phone

Shoes

Laptop

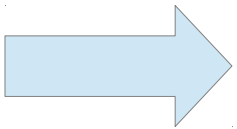
What?

Clothes

Mobile Phone

Shoes

Laptop



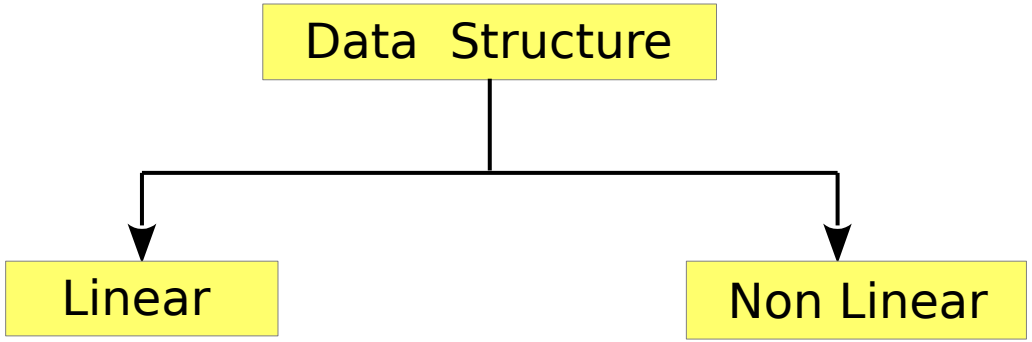
Data

Data Structures are specialized means of organizing and storing data in computers in such a way that we can perform operations on it in more efficiently.

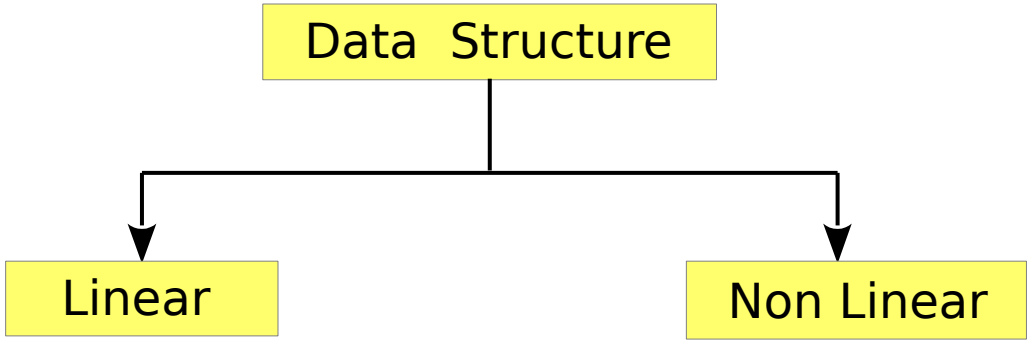
Types

Data Structure

Types

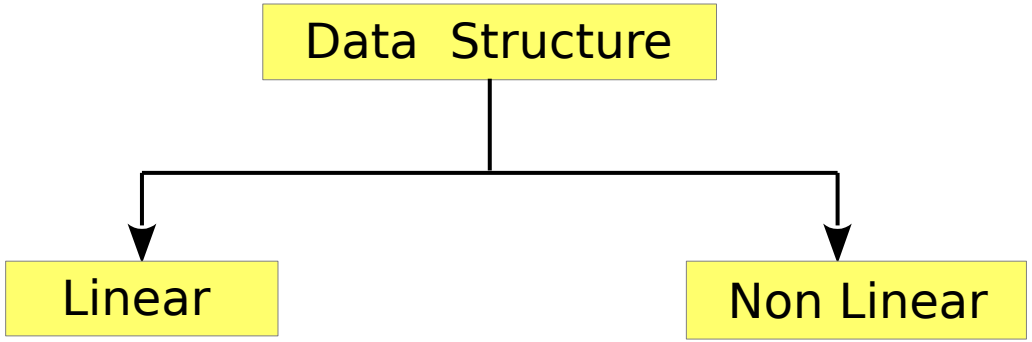


Types



- Linked List
- Stack
- Queue

Types



- Linked List
- Stack
- Queue

- Tree
- Graph

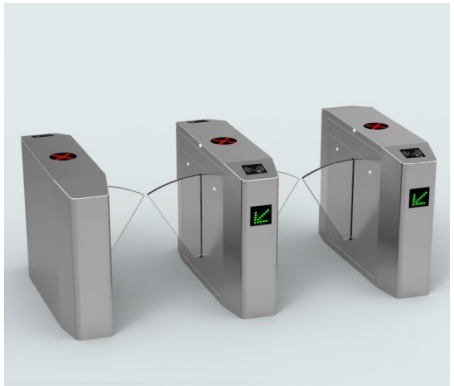
Why Data Structures?

Why?

Data Structure -Introduction

Why?

Dictionary

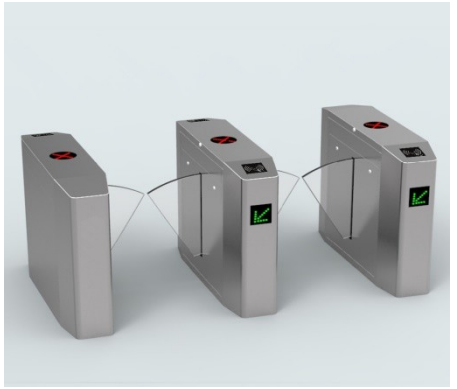


Metro Gates

Why?

Dictionary

Google



Metro Gates

Why?

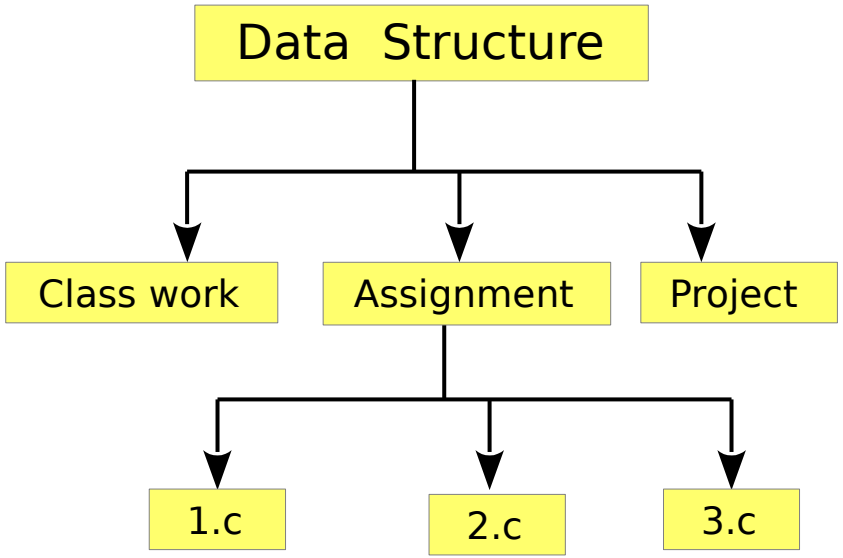
- Each Data Structure allows data to be stored in specific manner
- It allows efficient data search and retrieval
- It allows to manage large amount of data such as large database.

Where?

- Folders in File system

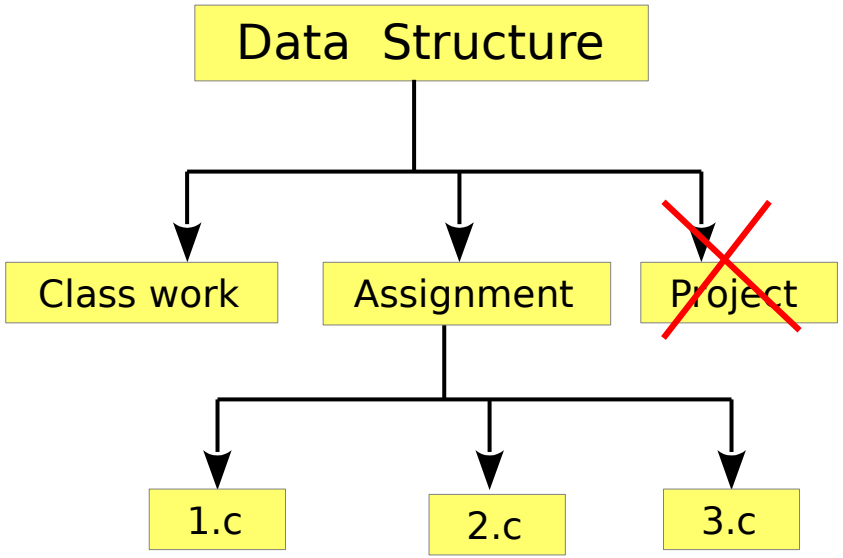
Where?

- Folders in File system



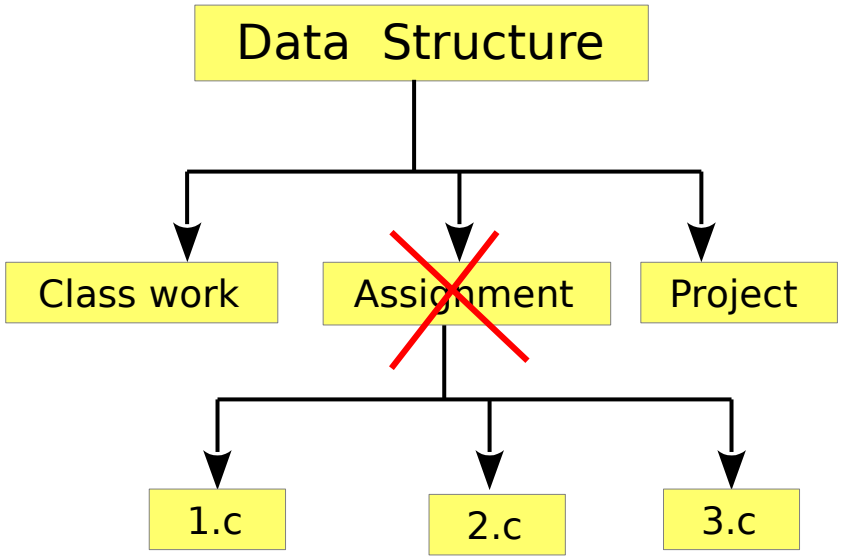
Where?

- Folders in File system



Where?

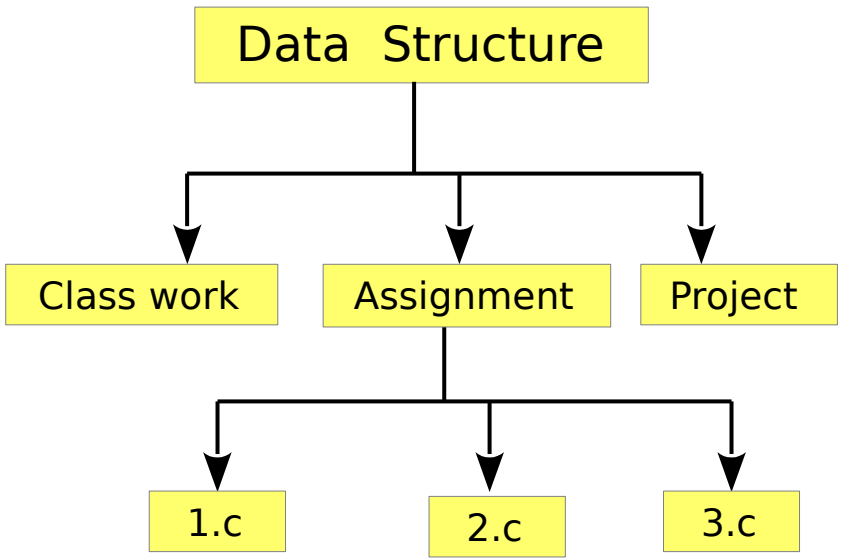
- Folders in File system



Where?

- Folders in File system

Tree



Where?

- Image Viewer

Photo -1

Where?

- Image Viewer

Photo -1

Photo -2

Where?

- Image Viewer

Photo -1

Photo -2

Photo -3

Where?

- Image Viewer

Photo -1

Photo -2

Photo -3

Where?

- Image Viewer

Photo -1

Photo -2

Photo -3

Where?

- Image Viewer

Photo -1

Photo -2

Photo -3

Where?

- Image Viewer

Double Linked list

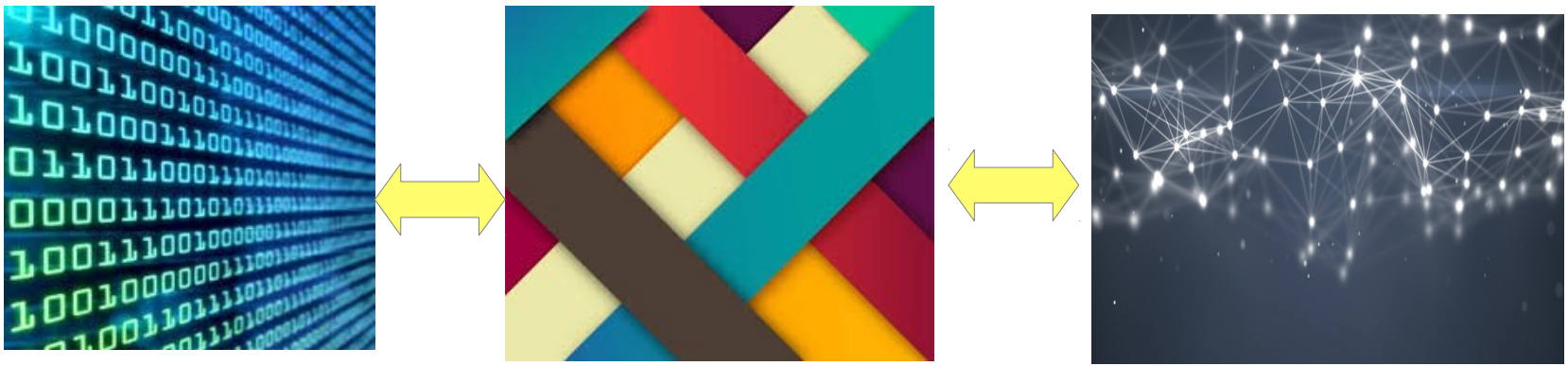


Photo -1 Photo -2 Photo -3

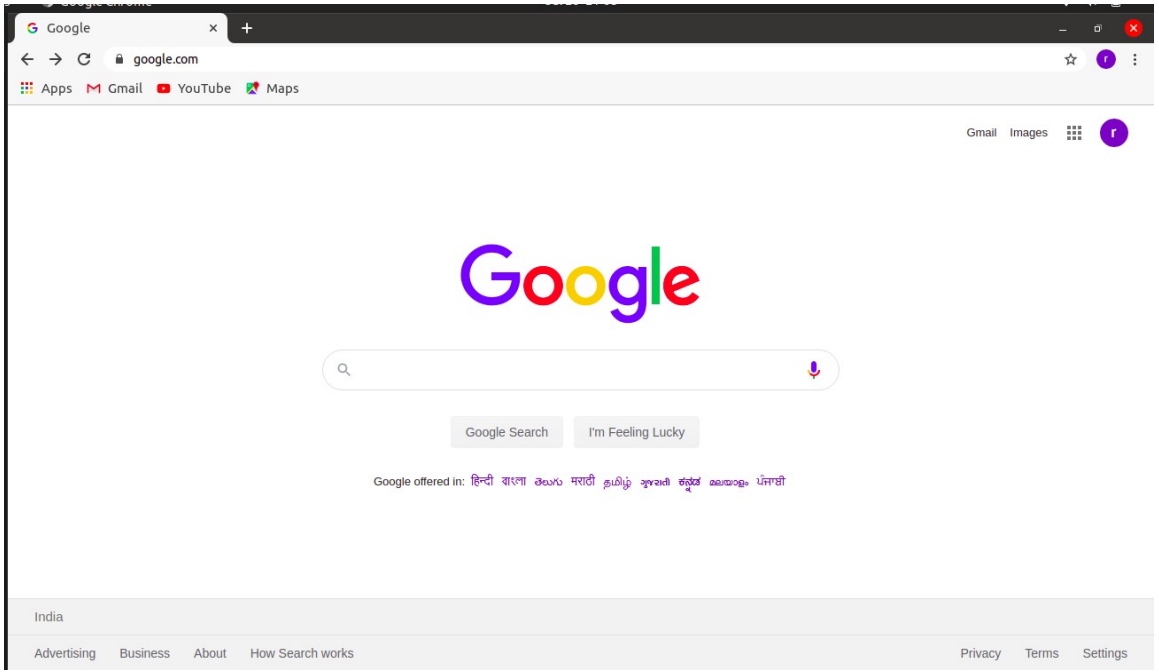
Where?

- Browser

Data Structure -Introduction

Where?

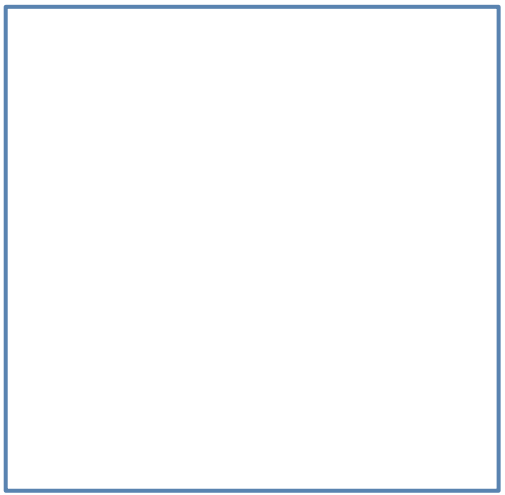
- Browser

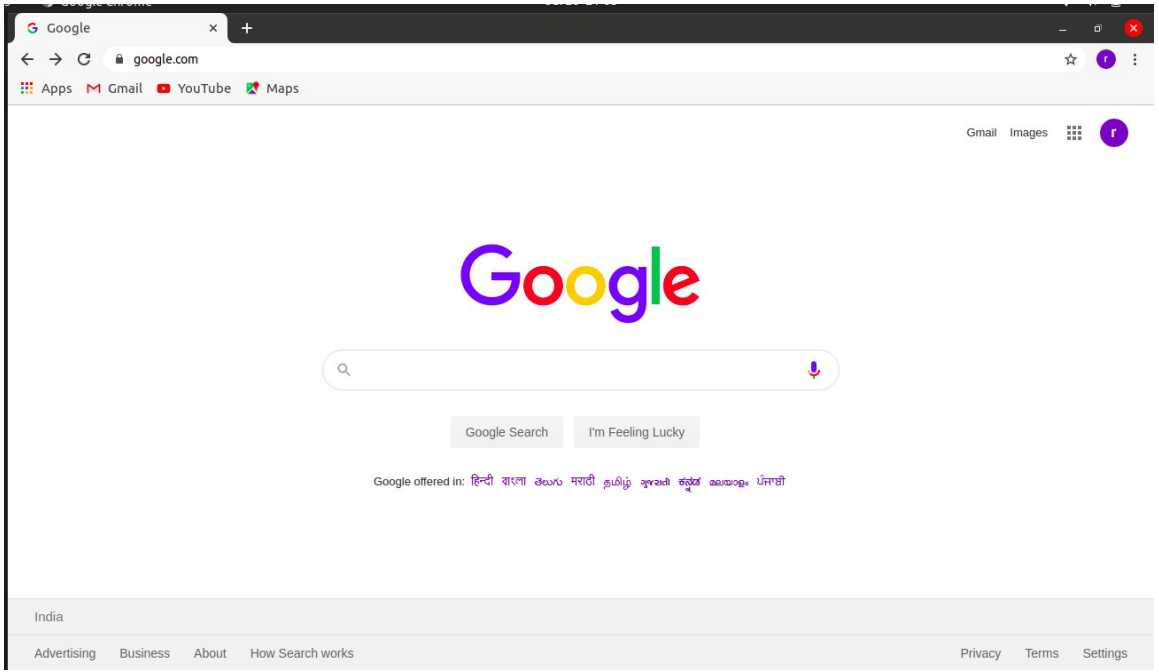


Data Structure -Introduction

Where?

- Browser



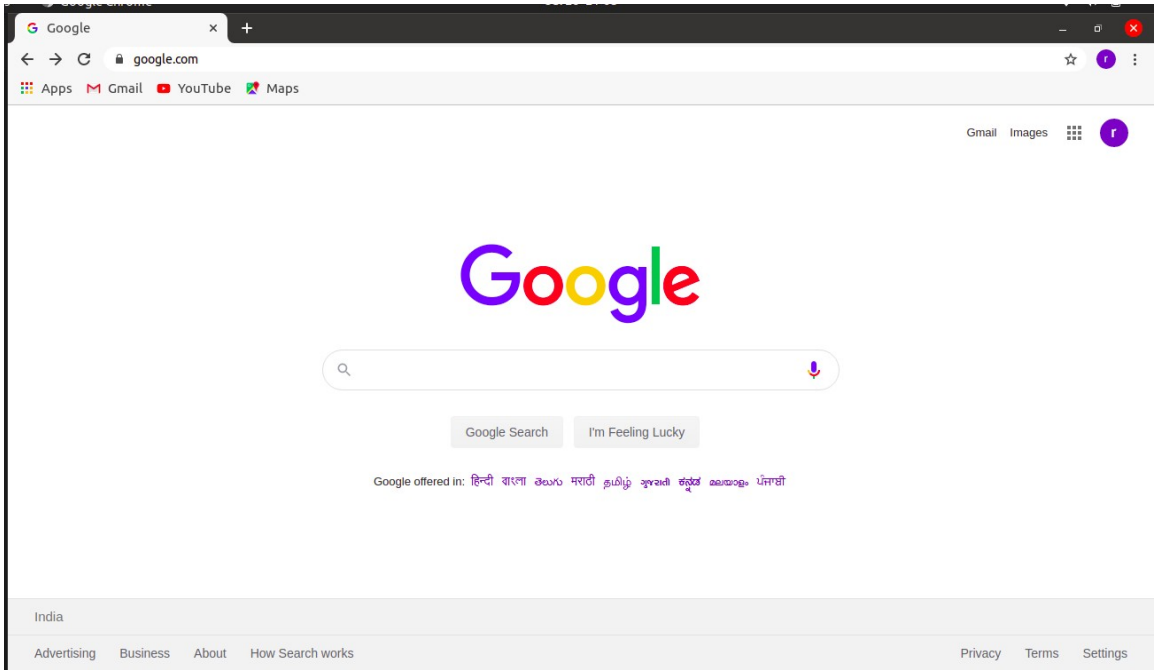


Data Structure -Introduction

Where?

- Browser

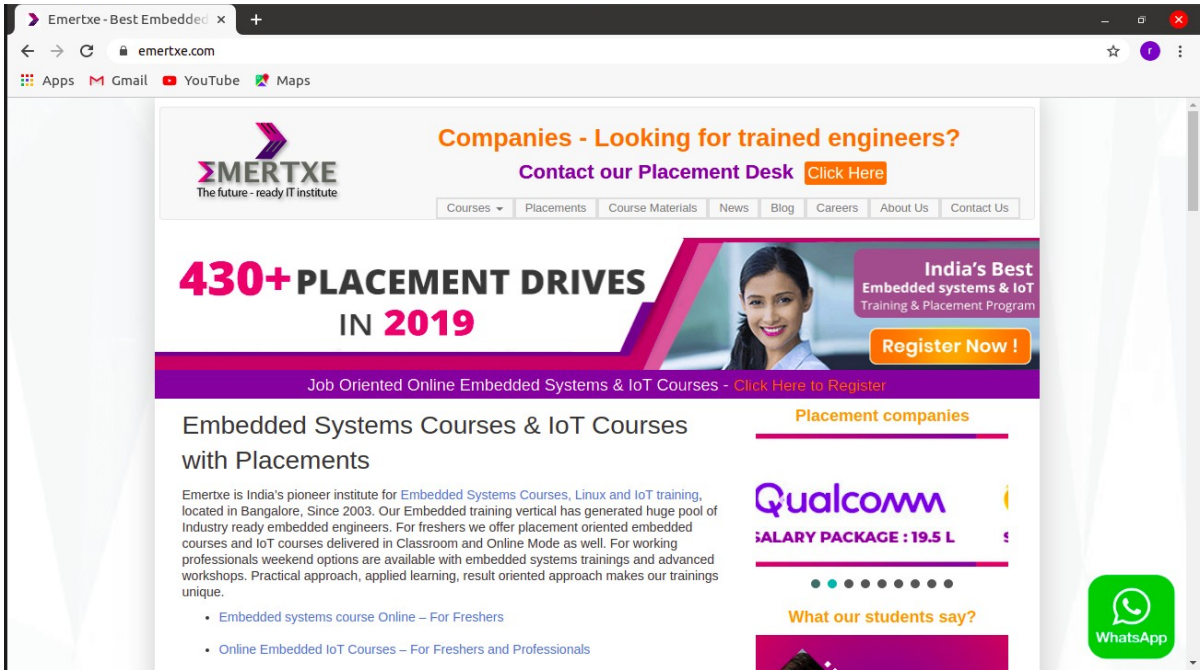
www.google.com



Where?

- Browser

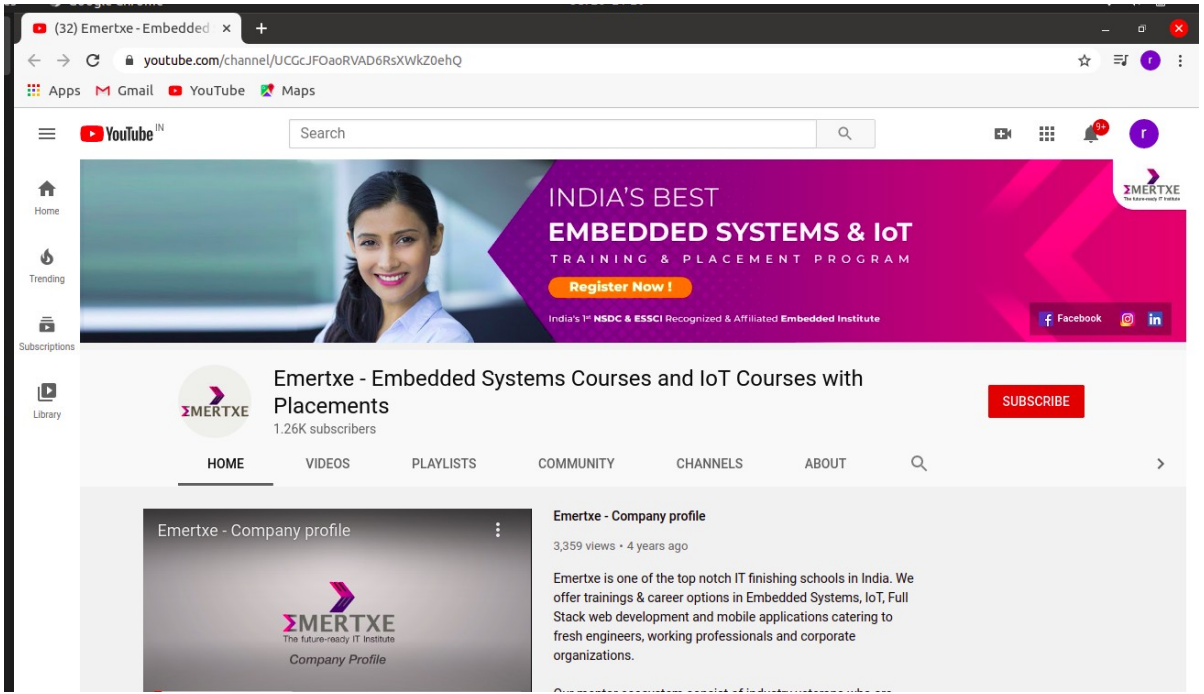
www.emertxe.com
www.google.com



Where?

- Browser

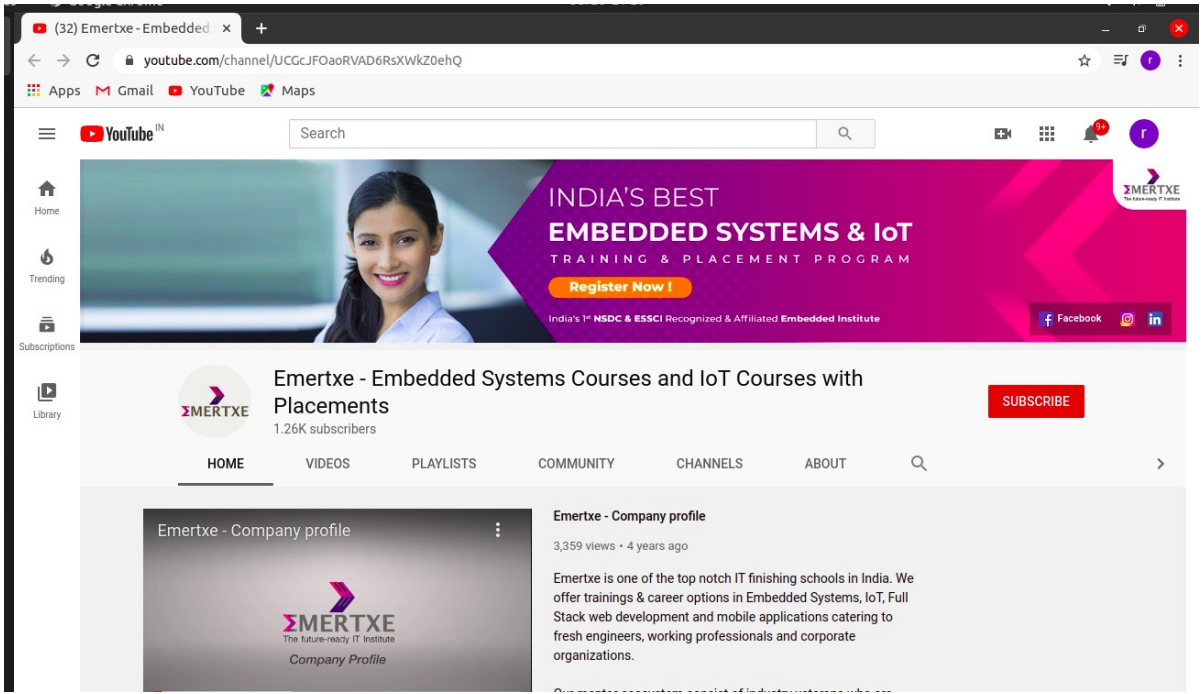
www.youtube.com/channel/U
www.emertxe.com
www.google.com



Where?

- Browser

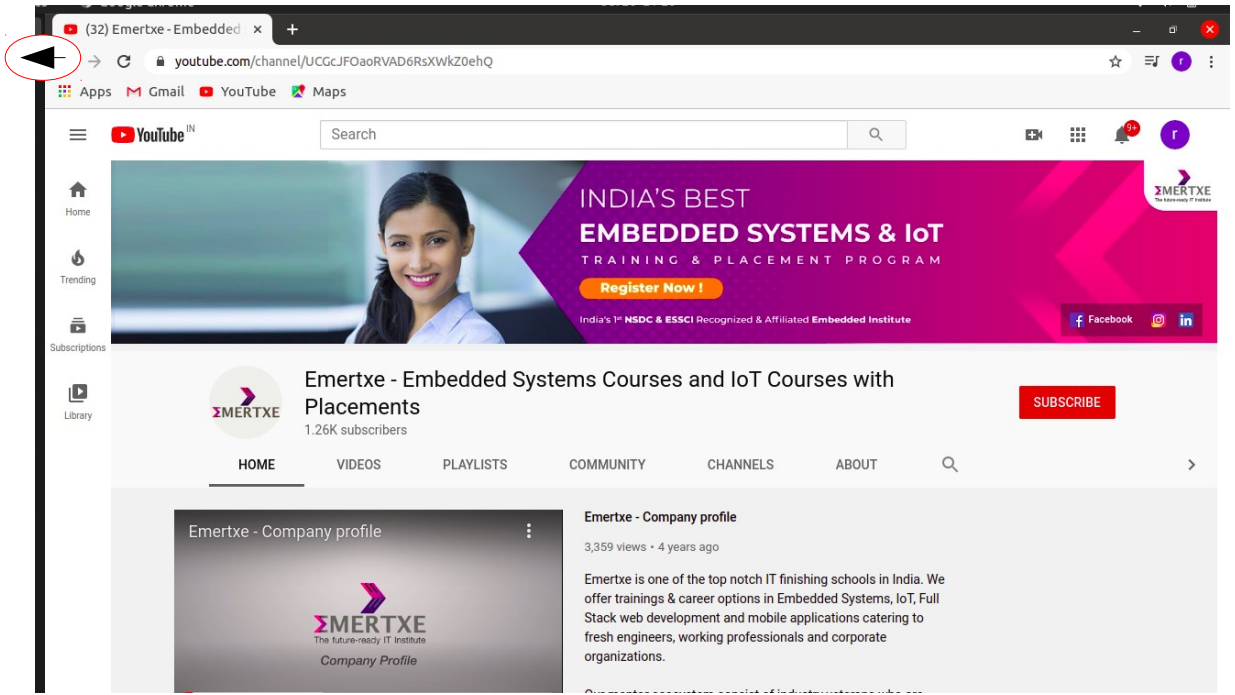
www.youtube.com/channel/U
www.emertxe.com
www.google.com



Where?

- Browser

www.youtube.com/channel/U
www.emertxe.com
www.google.com

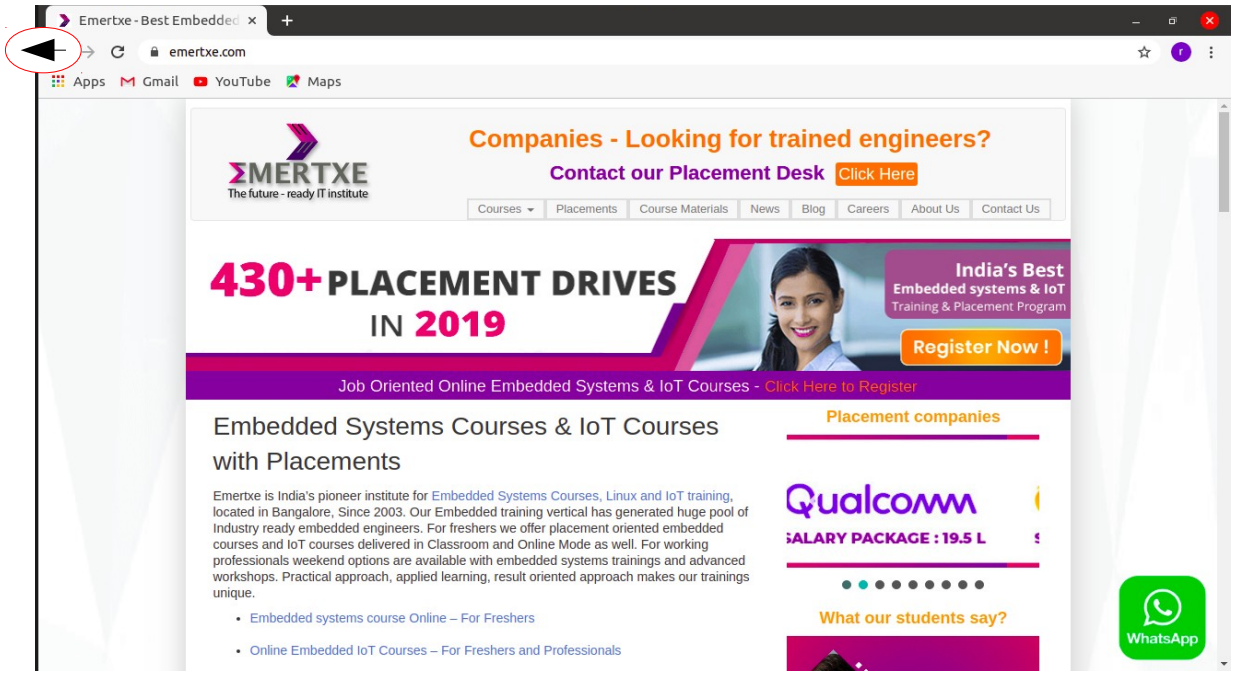


Where?

- Browser

www.emertxe.com

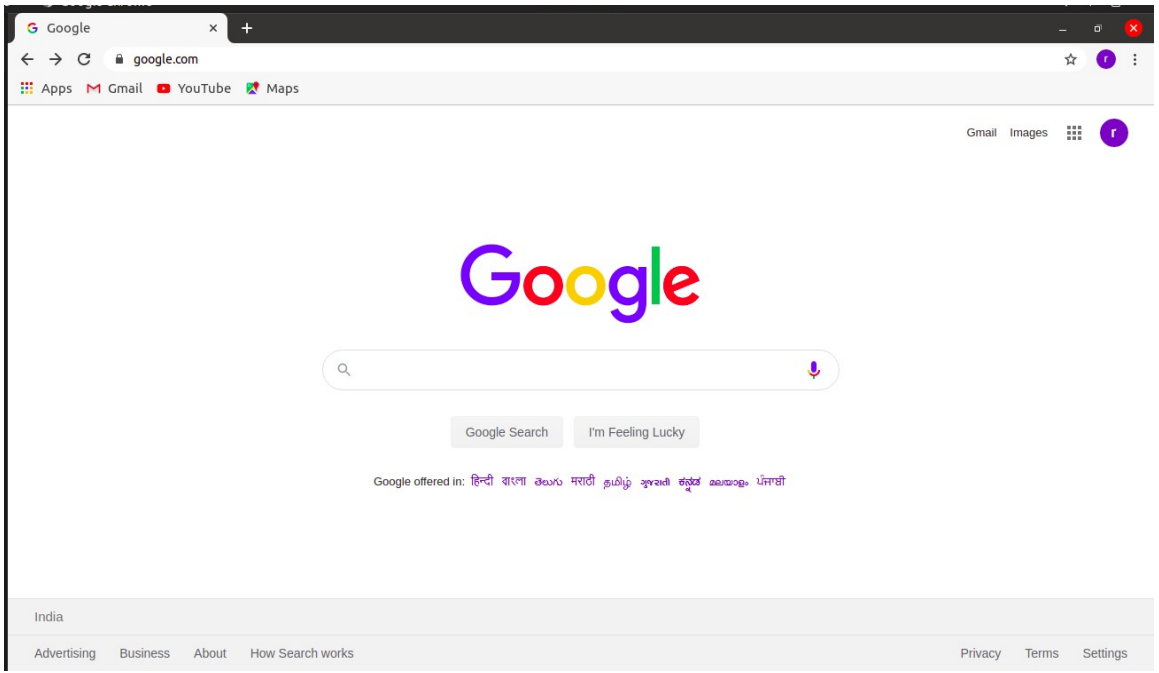
www.google.com



Where?

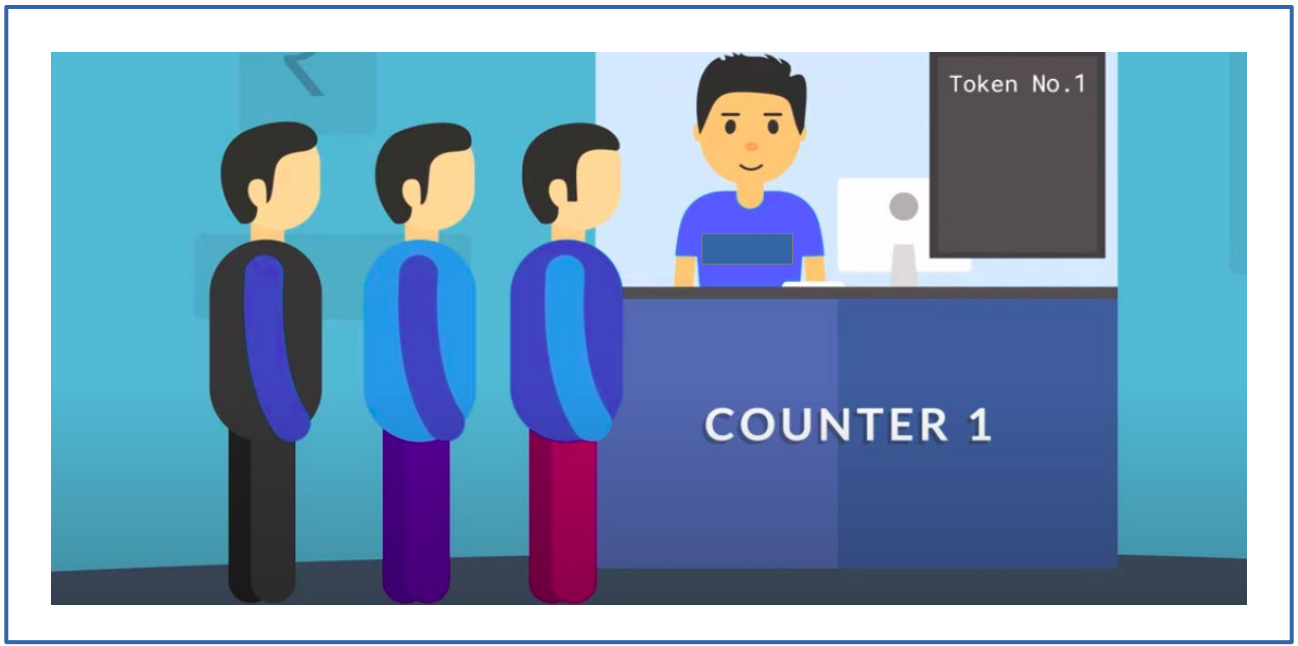
- Browser

www.google.com



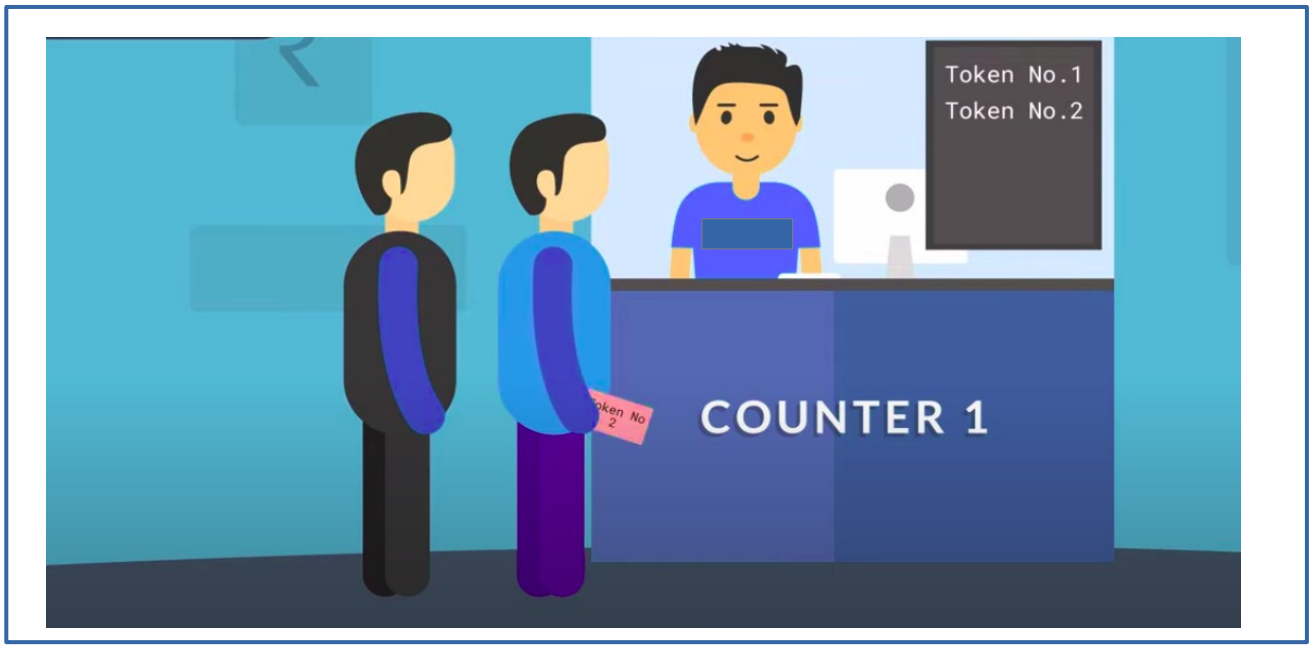
Where?

- Queue



Where?

- Queue



Where?

- Queue

Where?

- Queue

FIFO

Where?

- **Applications**
  - CPU Scheduling
  - Function
  - Expression Evaluation
  - Undo +Redo

Makefile