# W1\_OpSrc\_Avni\_23103028



## Assignment 1 Part A

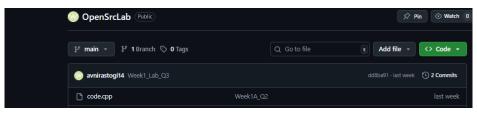
## Ques 1:

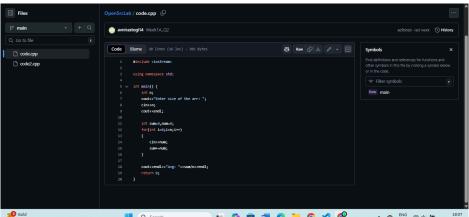
Reading 🗸

## Ques 2:

Repository Link:

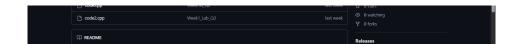
https://github.com/avnirastogi14/OpenSrcLab

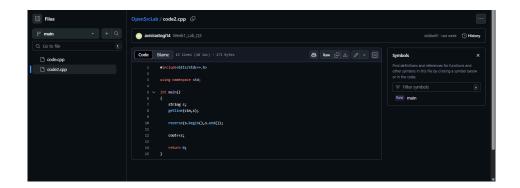




## Ques 3:

https://github.com/avnirastogi14/OpenSrcLab





## Ques 4:

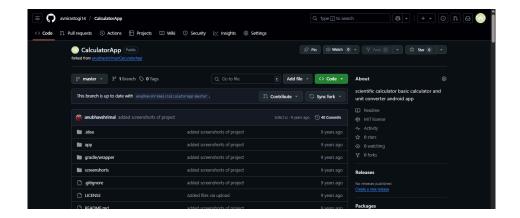
https://github.com/Chalarangelo/30-seconds-of-code

```
30-seconds-of-code/
  - snippets/
                  # Contains actual code snippets (JavaScript)
 - test/
                # Unit tests for each snippet
                 # Build scripts for processing snippets into docs/web format
  - scripts/
                 # Auto-generated documentation files
 - docs/
 - static/
                 # Assets for website (images, icons, etc.)
  - website/
                  # Source code for the website frontend
                 # GitHub actions/workflows and contribution templates
 github/
                     # Node.js dependencies and project config
— package.json
 — README.md
                      # Project overview and contribution instructions
 - LICENSE
                   # MIT License
```

## Tech Used:

- JavaScript
- React
- Astro
- SCSS

## Ques 5:



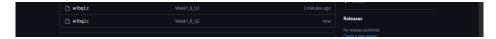
#### Original:

https://github.com/anubhavshrimal/CalculatorApp

#### Forked:

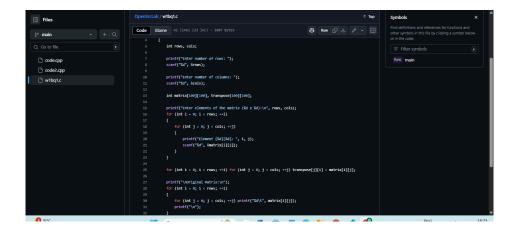


# Assignment 1: Part B



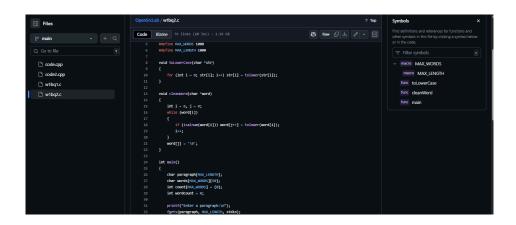
#### Ques 2:

https://github.com/avnirastogi14/OpenSrcLab



#### Ques 3:

https://github.com/avnirastogi14/OpenSrcLab



#### Ques 4:

Repository:

https://github.com/ibaaj/dijkstra-cartography



#### Code Structure:

#### Files:

## File: graph.h

### 'struct Graph\* createGraph(int vertices)'

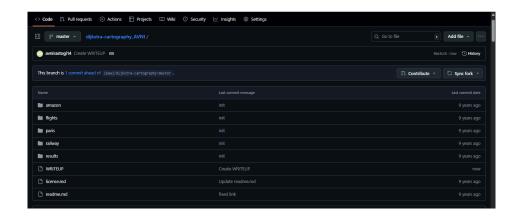
- Creates a new graph with a specified number of vertices.
- Returns a pointer to the allocated graph structure.

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## 📄 File: dijkstra.c

### `void dijkstra(struct Graph\* graph, int startVertex)`

- Implements Dijkstra's shortest path algorithm.
- Takes a graph and a starting vertex as input.
- Calculates the shortest path from `startVertex` to all other vertices using a priority queue approach.



#### repo forked:

https://github.com/avnirastogi14/dijkstra-cartography\_AVNI/