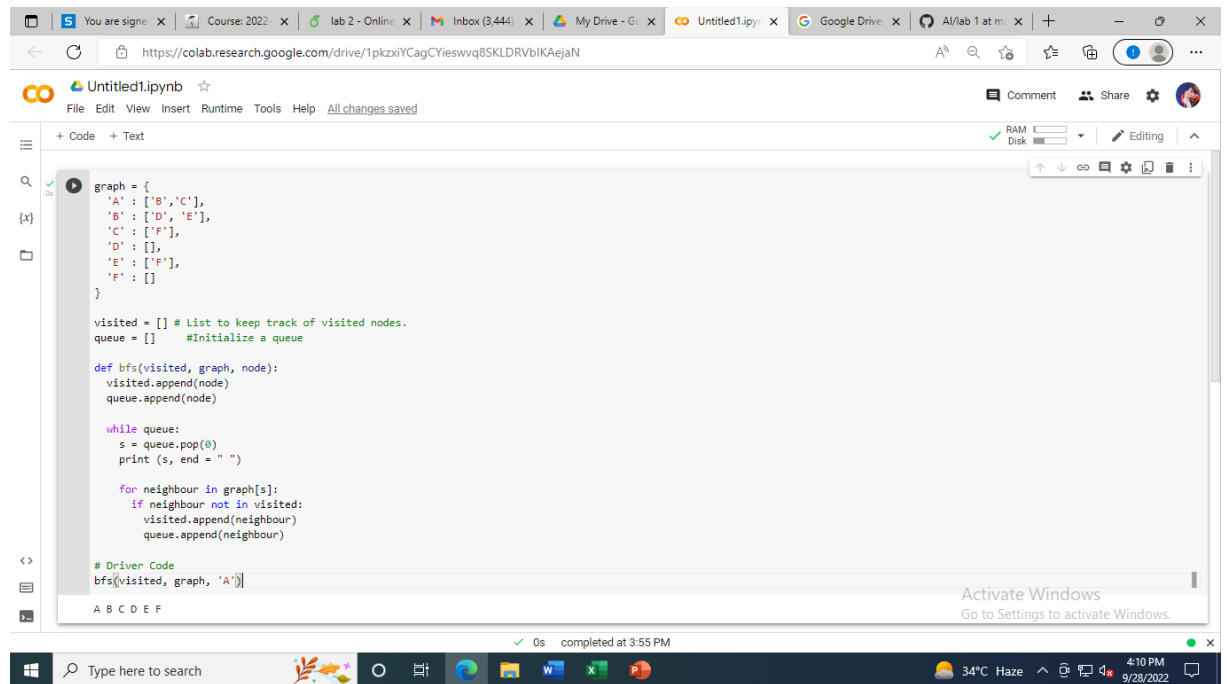


lab 2

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28 September 2022

1 BFS



```
graph = {
    'A': ['B','C'],
    'B': ['D', 'E'],
    'C': ['F'],
    'D': [],
    'E': ['F'],
    'F': []
}

visited = [] # List to keep track of visited nodes.
queue = []   # Initialize a queue

def bfs(visited, graph, node):
    visited.append(node)
    queue.append(node)

    while queue:
        s = queue.pop(0)
        print (s, end = " ")

        for neighbour in graph[s]:
            if neighbour not in visited:
                visited.append(neighbour)
                queue.append(neighbour)

# Driver Code
bfs(visited, graph, 'A')

A B C D E F
```

Figure 1: Breath First Search

```
graph = {
    'A': ['B','C'],
    'B': ['D', 'E'],
    'C': ['F'],
    'D': [],
    'E': ['F'],
```

```

    'F' : []
}

visited = [] # List to keep track of visited nodes.
queue = [] #Initialize a queue

def bfs(visited, graph, node):
    visited.append(node)
    queue.append(node)

    while queue:
        s = queue.pop(0)
        print (s, end = " ")

        for neighbour in graph[s]:
            if neighbour not in visited:
                visited.append(neighbour)
                queue.append(neighbour)

# Driver Code
bfs(visited, graph, 'A')

```