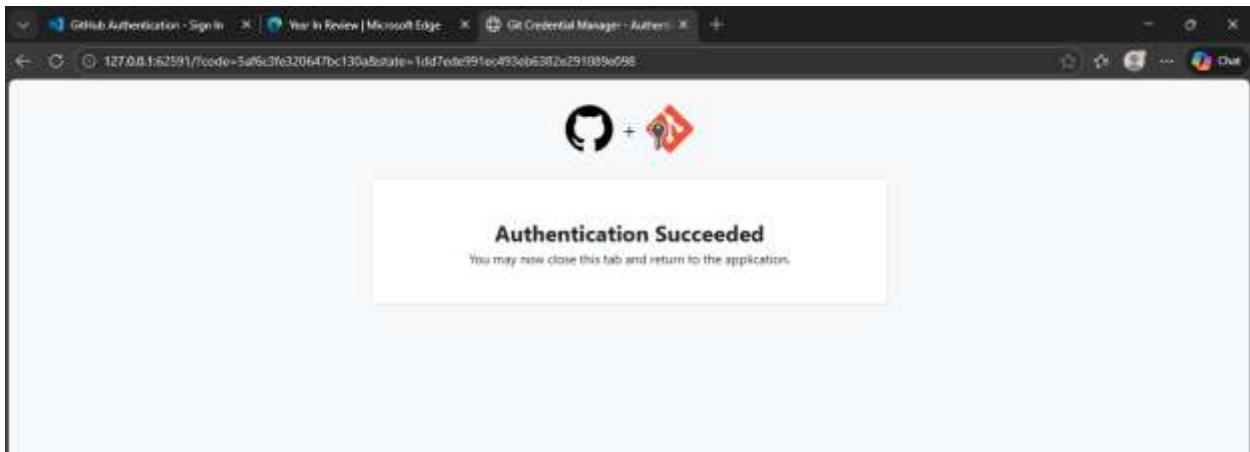
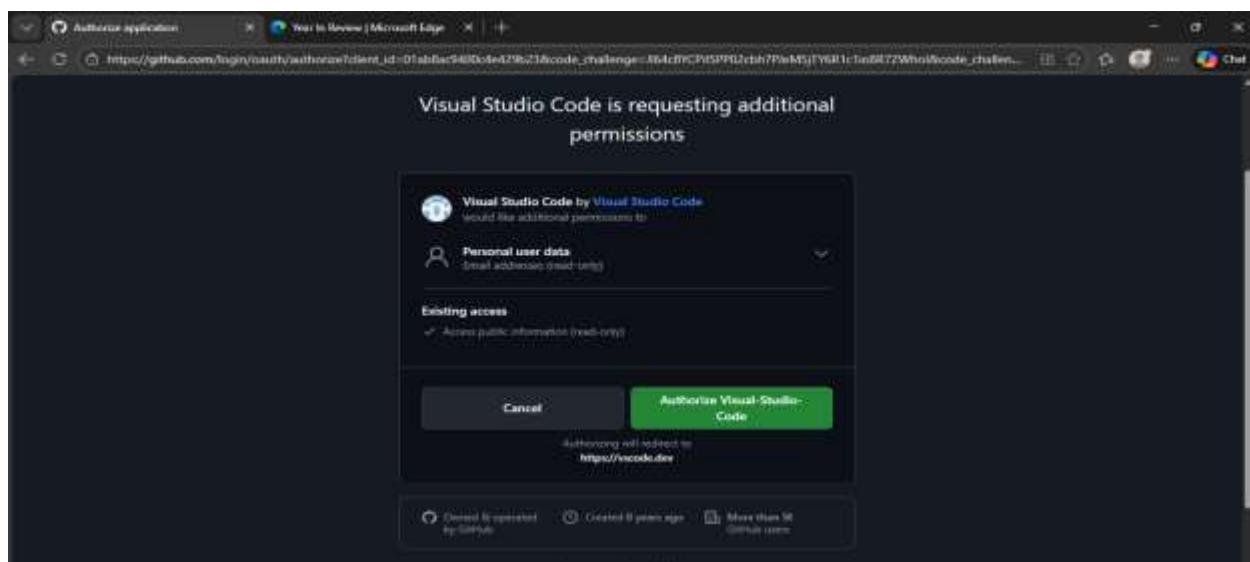
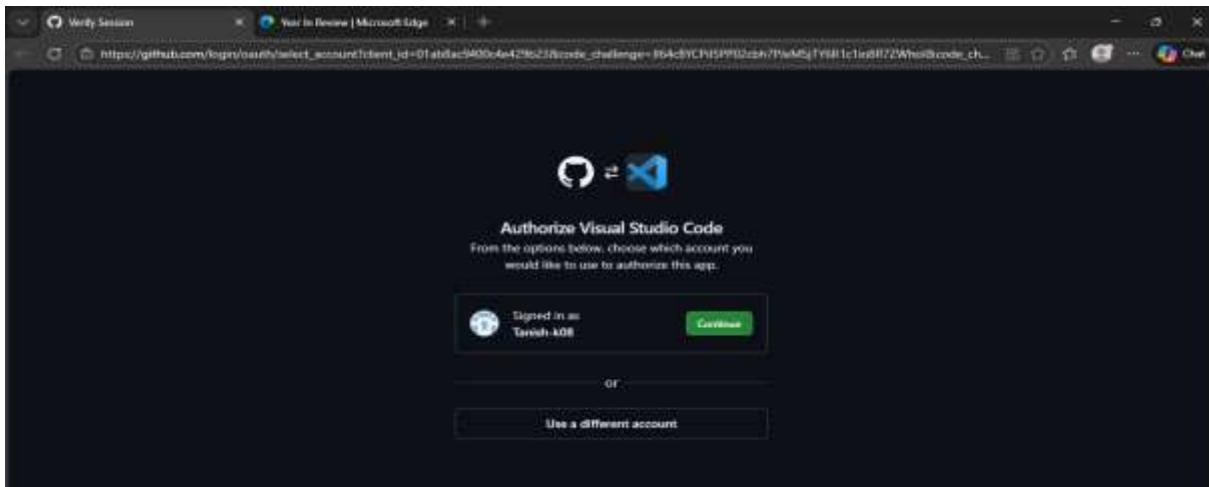


CM23021

Machine learning tools lab (Pre- Lab)

Pre-lab(verifying tensorflow.js):



The screenshot shows a browser window titled "TensorFlow.js Verification". The address bar indicates the file is located at "C:/MLU/HelloTensorflow.js/index.html". The main content area displays the text: "Verify TensorFlow.js installation by creating tensors, performing addition, and printing results." Below this, there is a code editor or developer tools interface showing a list of tensors and their shapes:

- Tensor [1, 2, 3]
- Tensor [4, 5, 6]
- Tensor [5, 7, 9]
- > a.print();
- Tensor [1, 2, 3]
- > b.print();
- Tensor [5, 7, 9]
- > a.print();
- Tensor [4, 5, 6]
- > b.print();

Lab assignment 1 :

The screenshot shows a browser window titled "Task 1 - Tensor Creation". The address bar indicates the file is located at "C:/MLU/HelloTensorflow.js/lab.assignment_1.html". The main content area displays the text: "Verify TensorFlow.js installation by creating tensors, performing addition, and printing results." Below this, there is a code editor or developer tools interface showing a list of tensors and their shapes:

- Tensor [5]
- Tensor [1, 2, 3]
- Tensor [(1, 2),
[3, 4]]
- > scalar.print();
- Tensor [5]
- > vector.print();
- > matrix.print();
- > array.print();
- Tensor [(1, 2),
[3, 4]]
- > matrix

Lab assignment 2:

The screenshot shows a browser window titled "Task 2 - Vector Operations" with the URL "C:/MITU/HelloTensorflow.py/lab.assignment_2.html". The page content displays a series of TensorFlow operations and their resulting tensors:

```
Tensor [3, 7, 31] tensor([3, 7, 31])
Tensor [2, 12, 30] tensor([2, 12, 30])
> v1.print()
Tensor [2, 4, 6] tensor([2, 4, 6])
< undefined
> v2.print()
Tensor [1, 3, 5] tensor([1, 3, 5])
< undefined
> v3.print()
Tensor [3, 7, 31] tensor([3, 7, 31])
< undefined
> multiply.print()
Tensor [2, 12, 30] tensor([2, 12, 30])
< undefined
>
```

Lab assignment 3 :

The screenshot shows a browser window titled "Task 2 - Reshape vs Flatten" with the URL "C:/MITU/HelloTensorflow.py/lab.assignment_3.html". The page content displays a series of TensorFlow operations and their resulting tensors:

```
Tensor [[1, 2, 3], [4, 5, 6]] tensor([[1, 2, 3], [4, 5, 6]])
Tensor [1[1, 2], [3, 4], [5, 6]] tensor([1[1, 2], [3, 4], [5, 6]])
Tensor [1, 2, 3, 4, 5, 6] tensor([1, 2, 3, 4, 5, 6])
> tensor.print()
Tensor [[1, 2, 3], [4, 5, 6]] tensor([[1, 2, 3], [4, 5, 6]])
< undefined
> reshaped.print()
Tensor [1[1, 2], [3, 4], [5, 6]] tensor([1[1, 2], [3, 4], [5, 6]])
< undefined
> flattened.print()
Tensor [1, 2, 3, 4, 5, 6] tensor([1, 2, 3, 4, 5, 6])
< undefined
>
```

At the bottom of the screen, a Windows taskbar is visible with icons for weather, search, file explorer, and various applications.