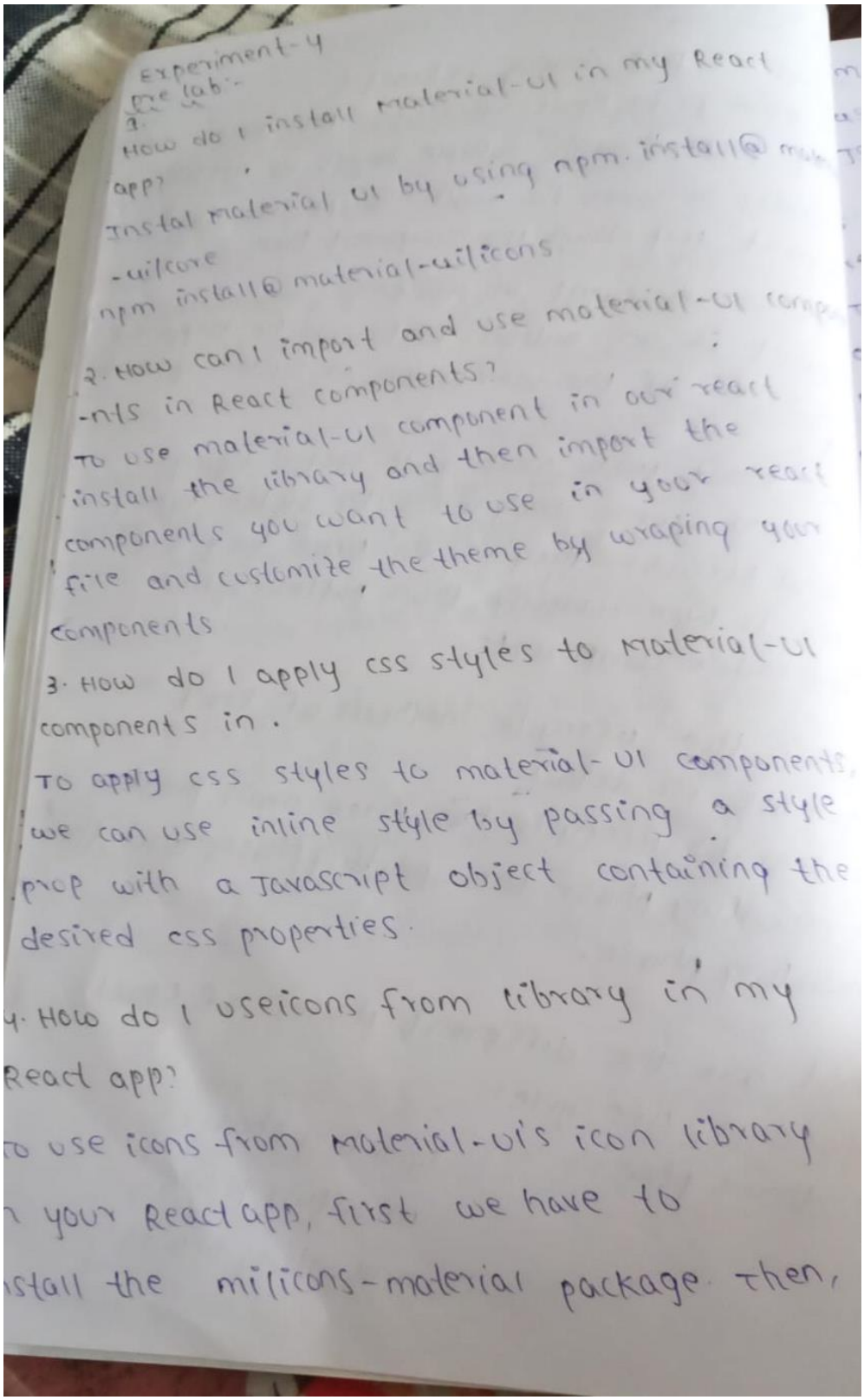
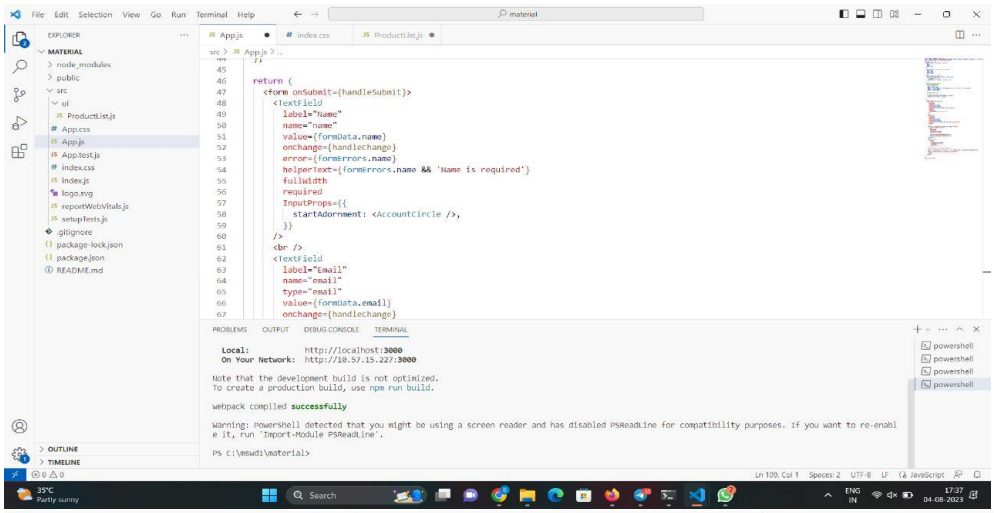
EXPERIMENT-4 WORKING OF MATERIAL UI

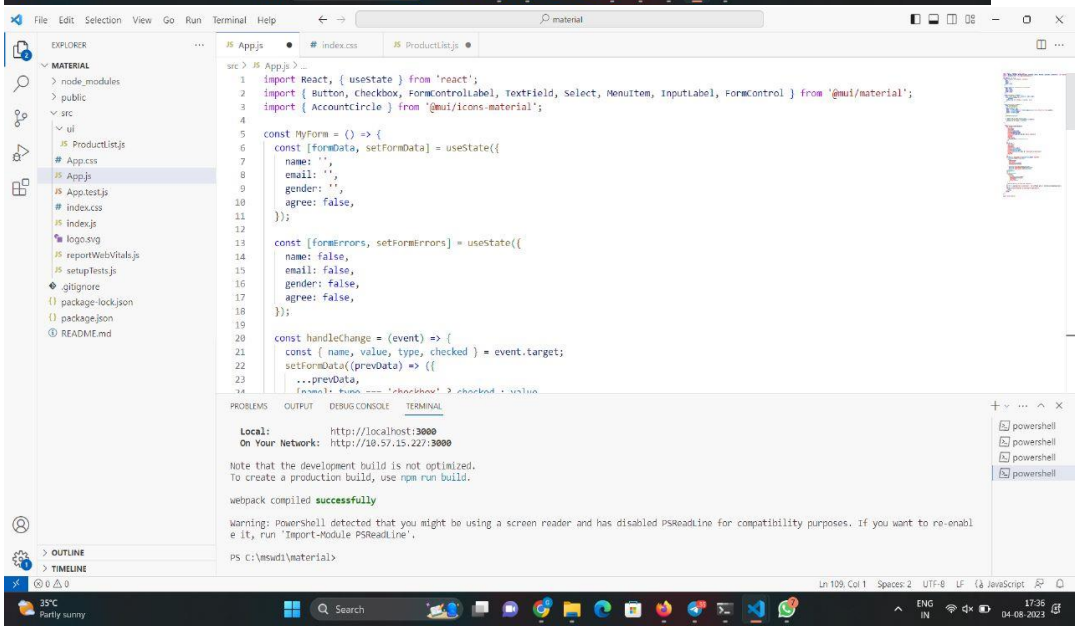


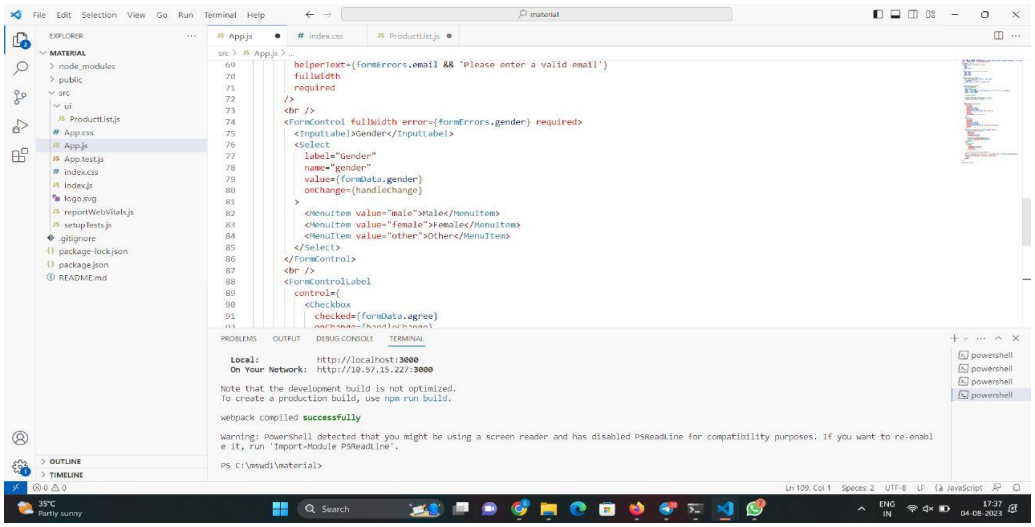
Experiment-4
Lab:-
1. How do I install material-UI in my React app?
Instal material UI by using npm. install@ mui
-uilcore
npm install@ material-uilicons
2. How can I import and use material-UI comp
-nts in React components?
To use material-UI component in our react
install the library and then import the
components you want to use in your react
file and customize the theme by wraping your
components
3. How do I apply css styles to material-UI
components in.
To apply css styles to material-UI components,
we can use inline style by passing a style
prop with a Javascript object containing the
desired css properties.
4. How do I useicons from library in my
React app?
to use icons from material-ui's icon library
n your React app, first we have to
nstall the milicons-material package. Then,

IN LAB EXPERIMENT-1

Create a simple React application with two routes: Home and About. Implement navigation links to switch between these routes using React Router.

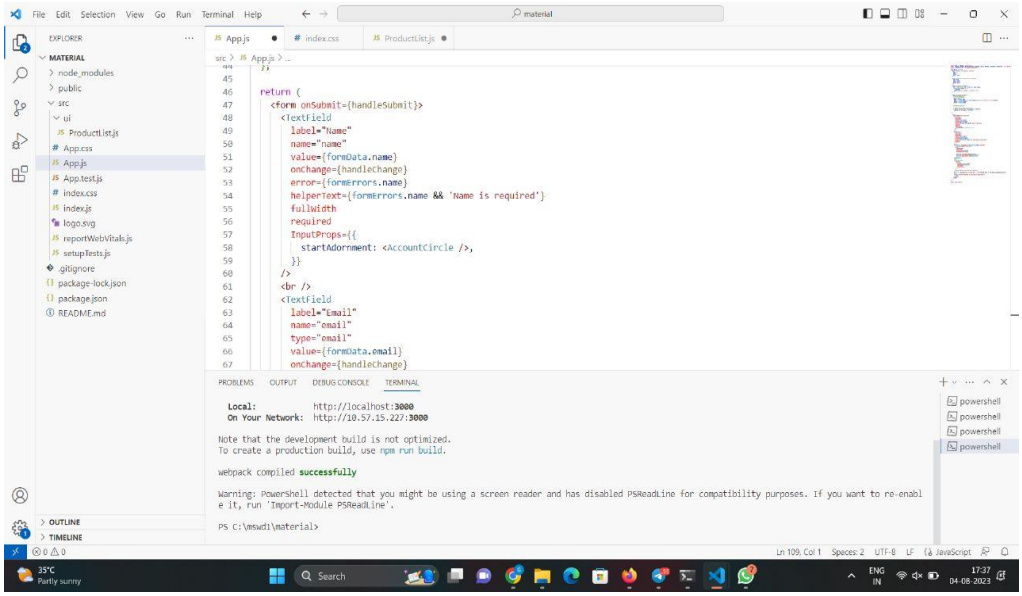





helperText={formErrors.email && 'Please enter a valid email'}
fullWidth
required
/>

<FormControl fullWidth error={formErrors.gender} required>
<InputLabel>Gender</InputLabel>
<Select
label="Gender"
name="gender"
value={formData.gender}
onChange={handleChange}
>
<MenuItem value="male">Male</MenuItem>
<MenuItem value="female">Female</MenuItem>
<MenuItem value="other">Other</MenuItem>
</Select>
</FormControl>

<FormControlLabel
control={
<Checkbox
checked={formData.agree}
Local: http://localhost:3000
On Your Network: http://10.57.15.227:3000
Note that the development build is not optimized.
To create a production build, use npm run build.
webpack compiled successfully
Warning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enable it, run 'Import-Module PSReadLine'.
PS C:\mswd1\material>


}
return (
<form onSubmit={handleSubmit}>
<TextField
label="Name"
name="name"
value={formData.name}
onChange={handleChange}
error={formErrors.name}
helperText={formErrors.name && 'Name is required'}
fullWidth
required
InputProps={{
startAdornment: <AccountCircle />,
}}
/>

<TextField
label="Email"
name="email"
type="email"
value={formData.email}
onChange={handleChange}
Local: http://localhost:3000
On Your Network: http://10.57.15.227:3000
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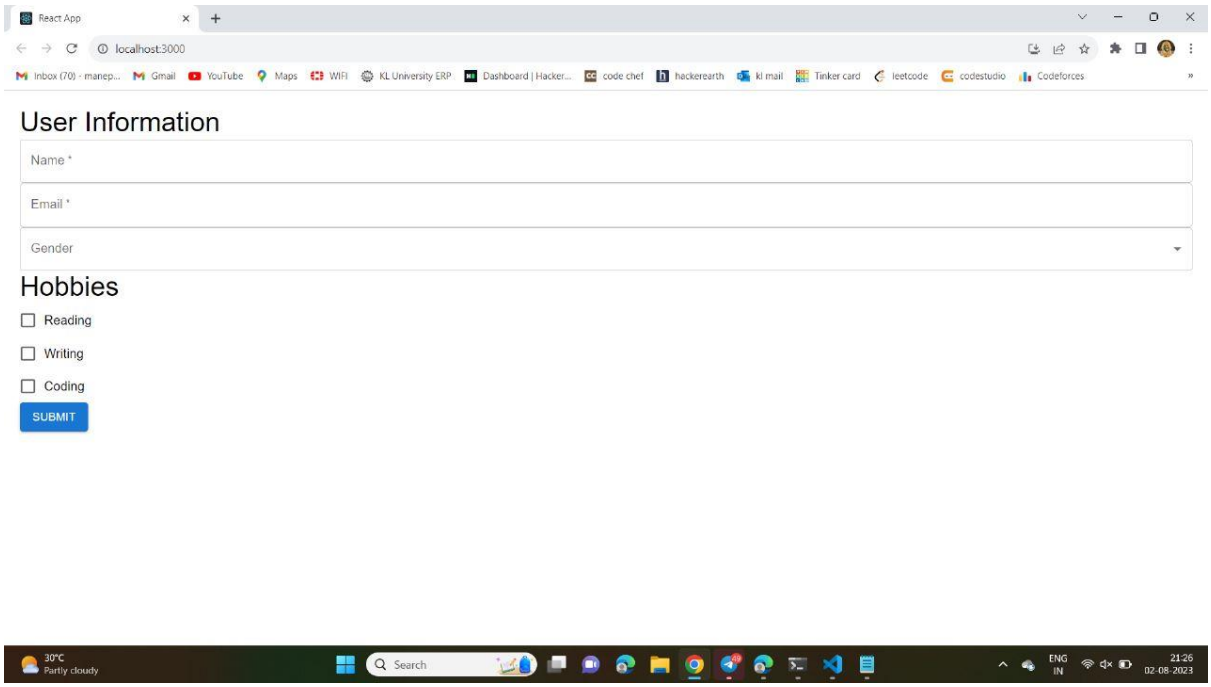
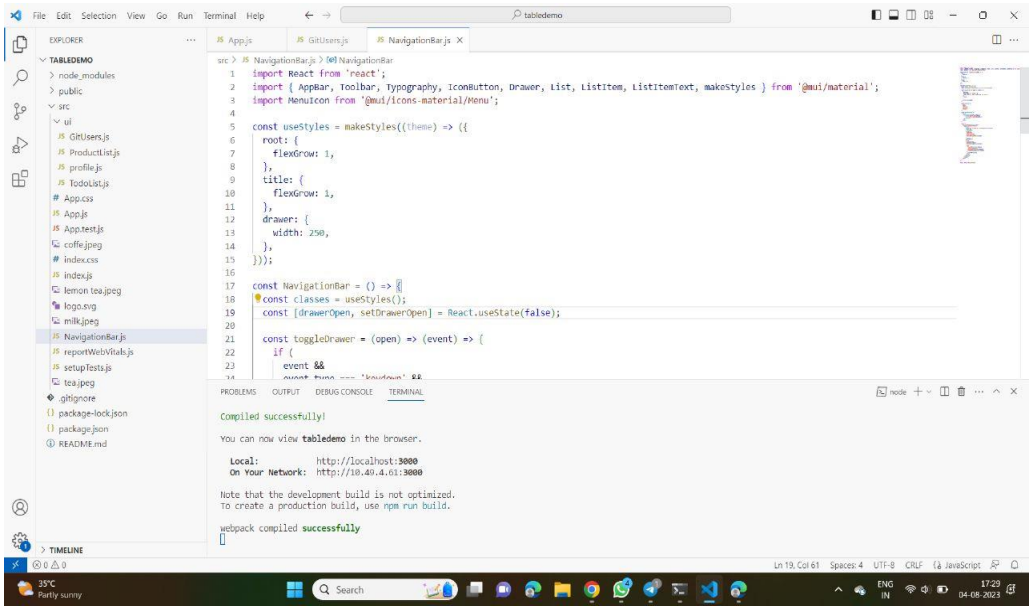
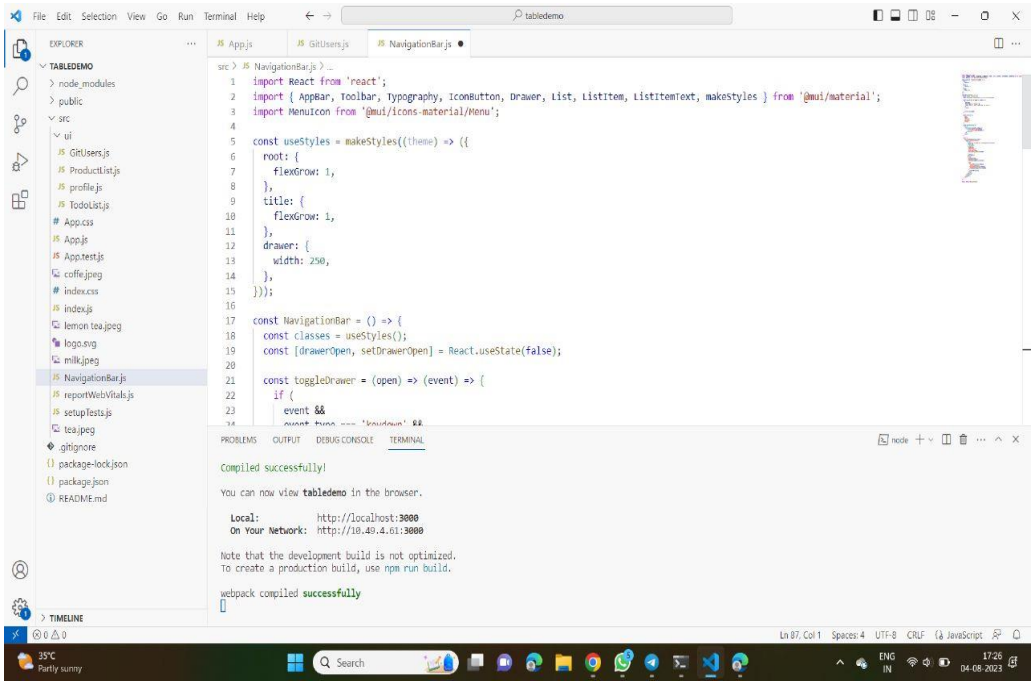
To create a production build, use npm run build.
webpack compiled successfully
Warning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enable it, run 'Import-Module PSReadLine'.
PS C:\mswd1\material>

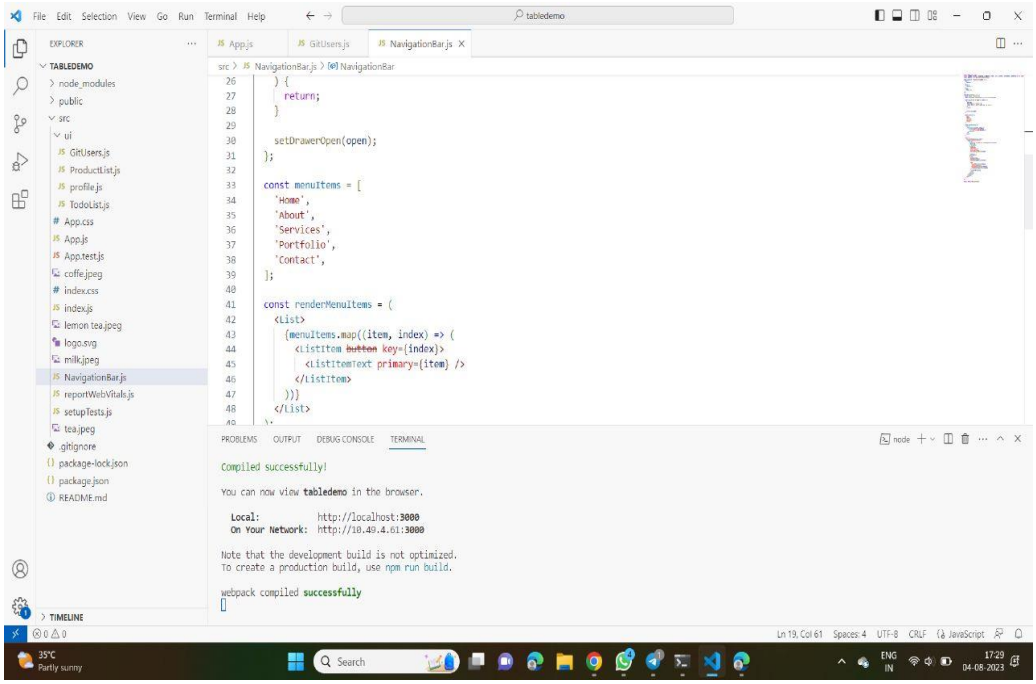
OUTPUT:


React App
localhost:3000
User Information
Name *
Email *
Gender
Hobbies
Reading
Writing
Coding
SUBMIT

IN LAB EXPERIMENT-2






File Edit Selection View Go Run Terminal Help
tabledemo
EXPLORER
TABLEDEMO
node_modules
public
src
ui
GitUsers.js
ProductList.js
profile.js
TodoList.js
App.css
App.js
App.test.js
coffe.jpeg
index.css
index.js
lemon tea.jpeg
logo.svg
milk.jpeg
NavigationBar.js
reportWebVitals.js
setupTests.js
tea.jpeg
.gitignore
package-lock.json
package.json
README.md
TIMELINE
App.js
GitUsers.js
NavigationBar.js
src > NavigationBar.js > NavigationBar
} {
return;
}
setDrawerOpen(open);
};
const menuItems = [
'Home',
'About',
'Services',
'Portfolio',
'Contact',
];
const renderMenuItems = (
<List>
{menuItems.map((item, index) => (
<ListItem button key={index}>
<ListItemText primary={item} />
</ListItem>
))}
</List>
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
node
Compiled successfully!
You can now view tabledemo in the browser.
Local: http://localhost:3000
On Your Network: http://10.49.4.61:3000
Note that the development build is not optimized.
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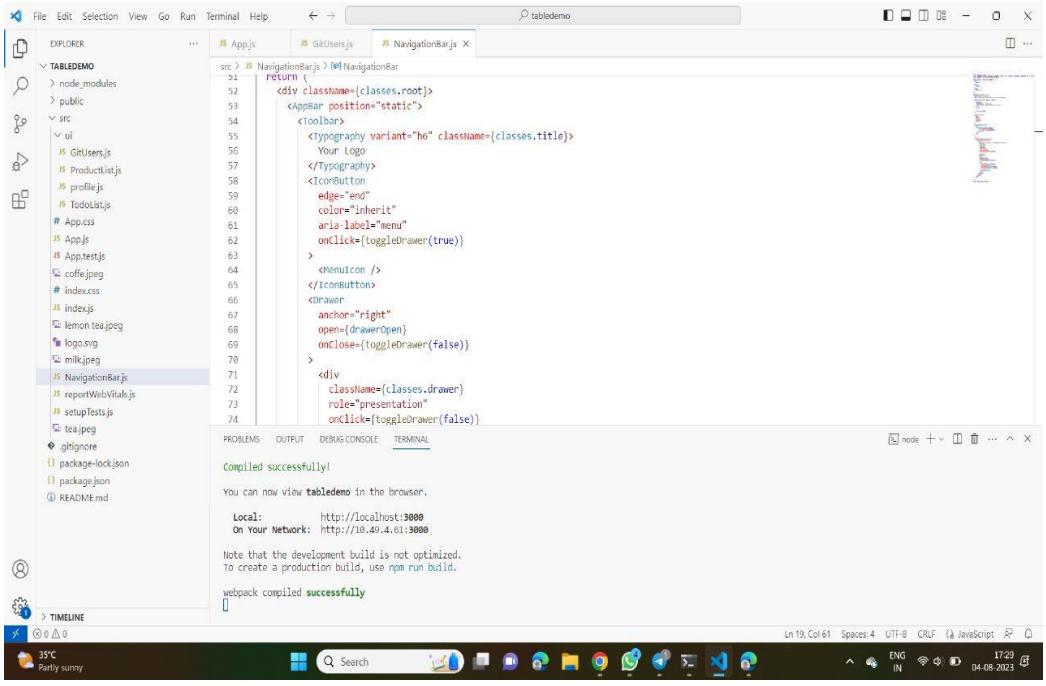
webpack compiled successfully
Ln 19, Col 61
Spaces: 4
UTF-8
CRLF
JavaScript
35°C
Partly sunny
Search
ENG
IN
17:29
04-08-2023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tea.jpeg
.gitignore
package-lock.json
package.json
README.md
TIMELINE
App.js
GitUsers.js
NavigationBar.js
src > NavigationBar.js > NavigationBar
return (

<AppBar position="static">
<Toolbar>
<Typography variant="h6" className={classes.title}>
Your Logo
</Typography>
<IconButton
edge="end"
color="inherit"
aria-label="menu"
onClick={toggleDrawer(true)}
>
<MenuIcon />
</IconButton>
<Drawer
anchor="right"
open={drawerOpen}
onClose={toggleDrawer(false)}
>
<div
className={classes.drawer}
role="presentation"
onClick={toggleDrawer(false)}
PROBLEMS
OUTPUT
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TERMINAL
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Compiled successfully!
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Spaces: 4
UTF-8
CRLF
JavaScript
35°C
Partly sunny
Search
ENG
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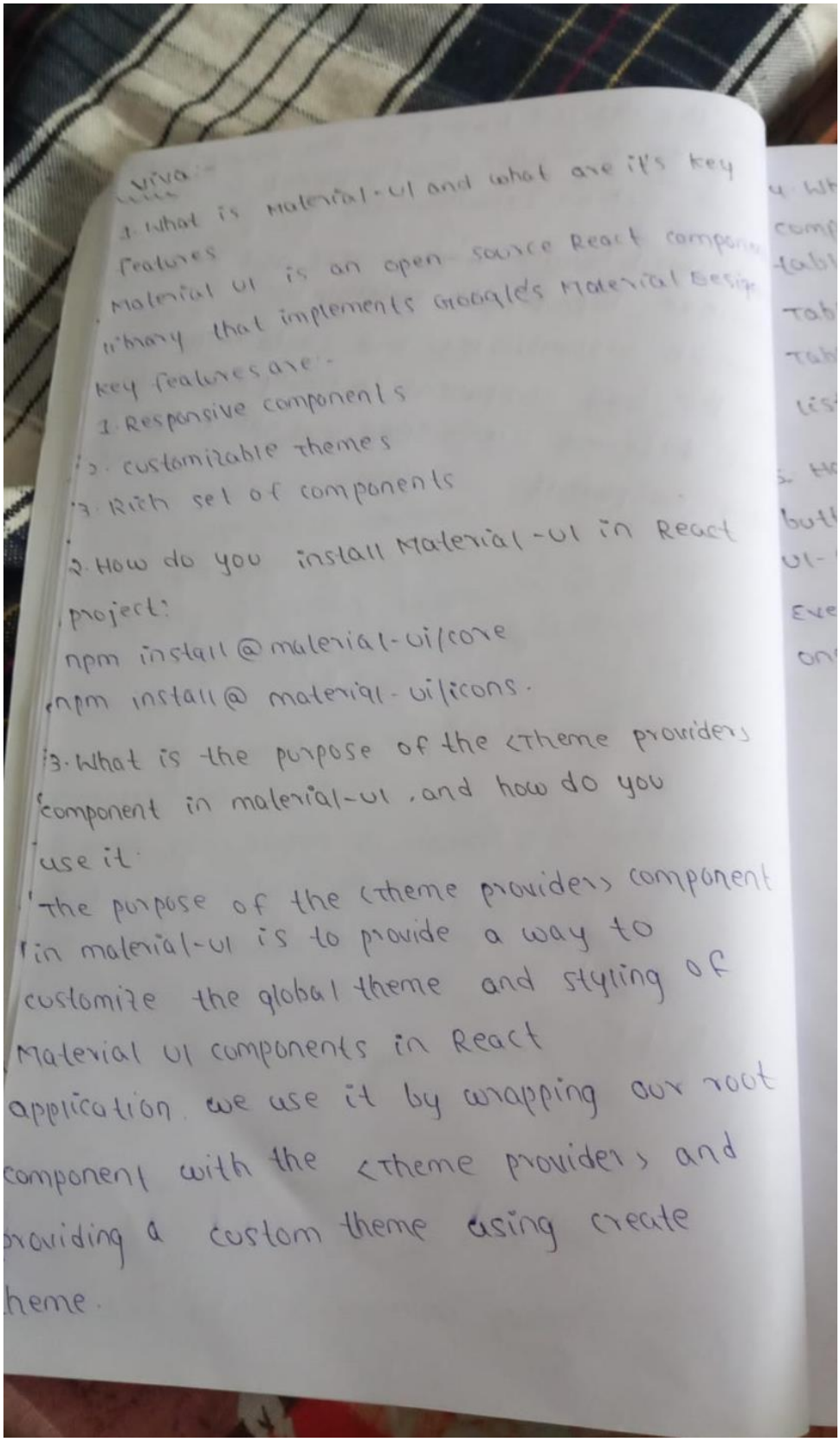
17:29
04-08-2023

Sample VIVA-VOCE Questions (In-Lab):



Viva:-

1. What is Material-UI and what are it's key features

Material UI is an open-source React compon library that implements Google's Material Desig

Key features are:-

1. Responsive components
2. customizable themes
3. Rich set of components

2. How do you install Material-UI in React project:

npm install @material-ui/core

npm install @ material-ui/icons.

3. What is the purpose of the <theme providers component in material-UI, and how do you use it:

The purpose of the <theme providers> component in material-UI is to provide a way to customize the global theme and styling of Material UI components in React application. we use it by wrapping our root component with the <theme providers> and providing a custom theme using create theme.

4. What are some commonly used material-ui components for displaying data, such as tables and lists?

Table:- Table head, TableBody, TableRow and Table cell

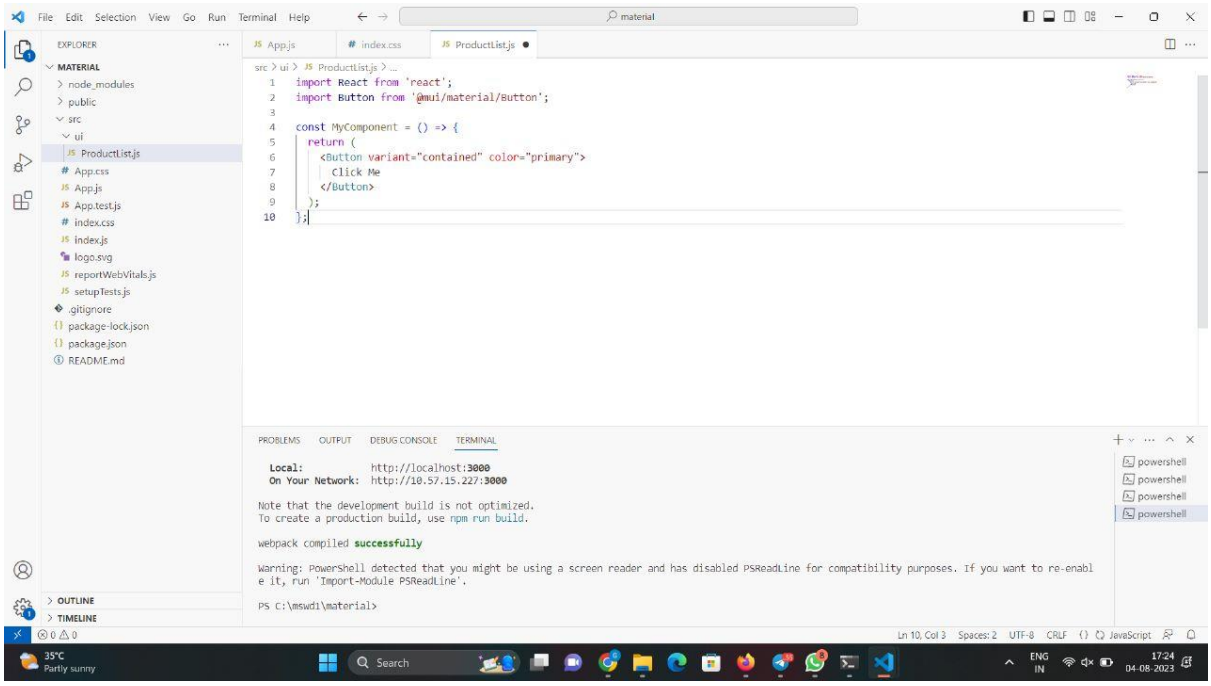
list:- listItemIcon, ListItemText.

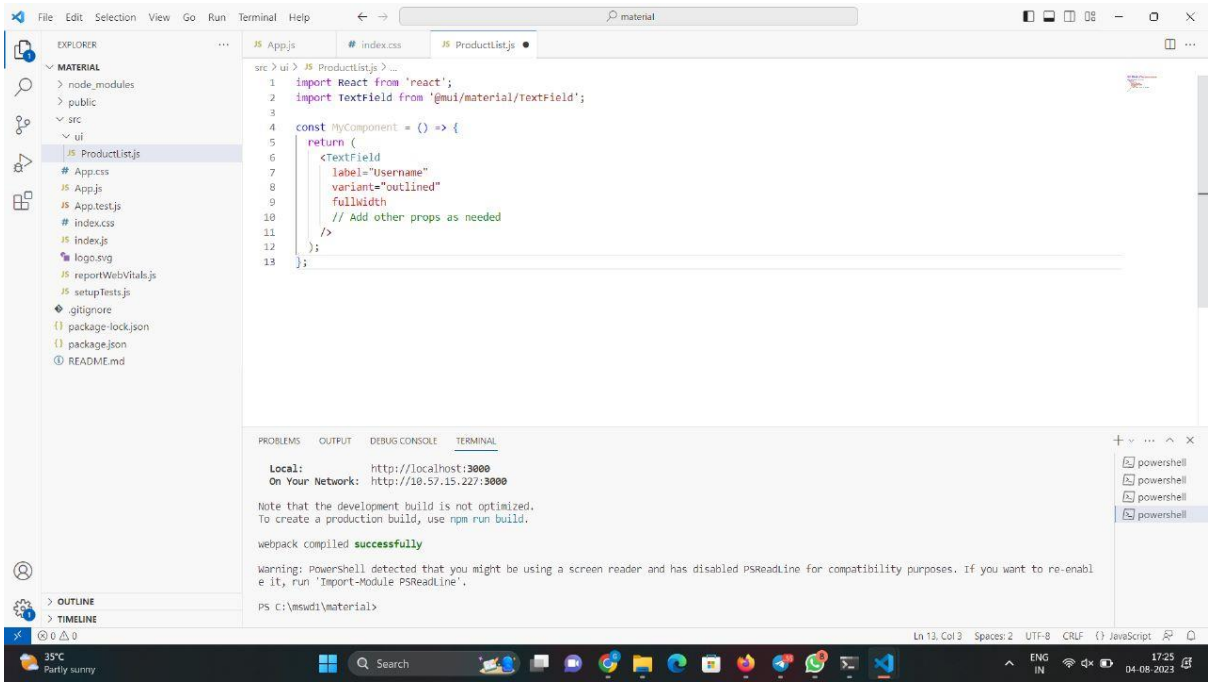
5. How do you handle user interaction, such as button clicks or menu selections using material ui-components?

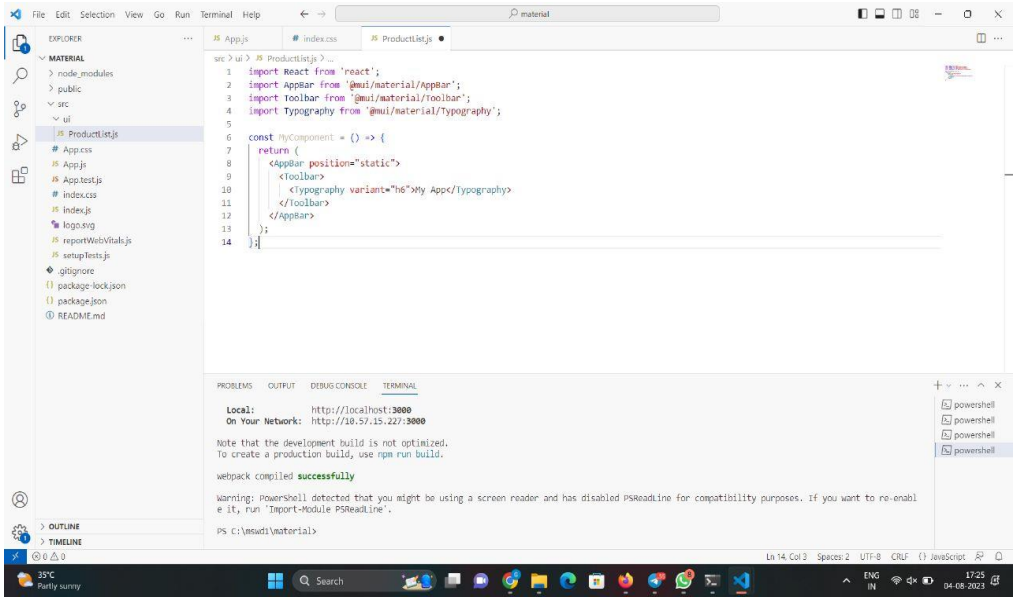
Event handler functions for specific events like onClick, or onChange

POST LAB: QUESTION:1

How can you create a dynamic route in React Router that accepts a parameter and renders different content based on that parameter?

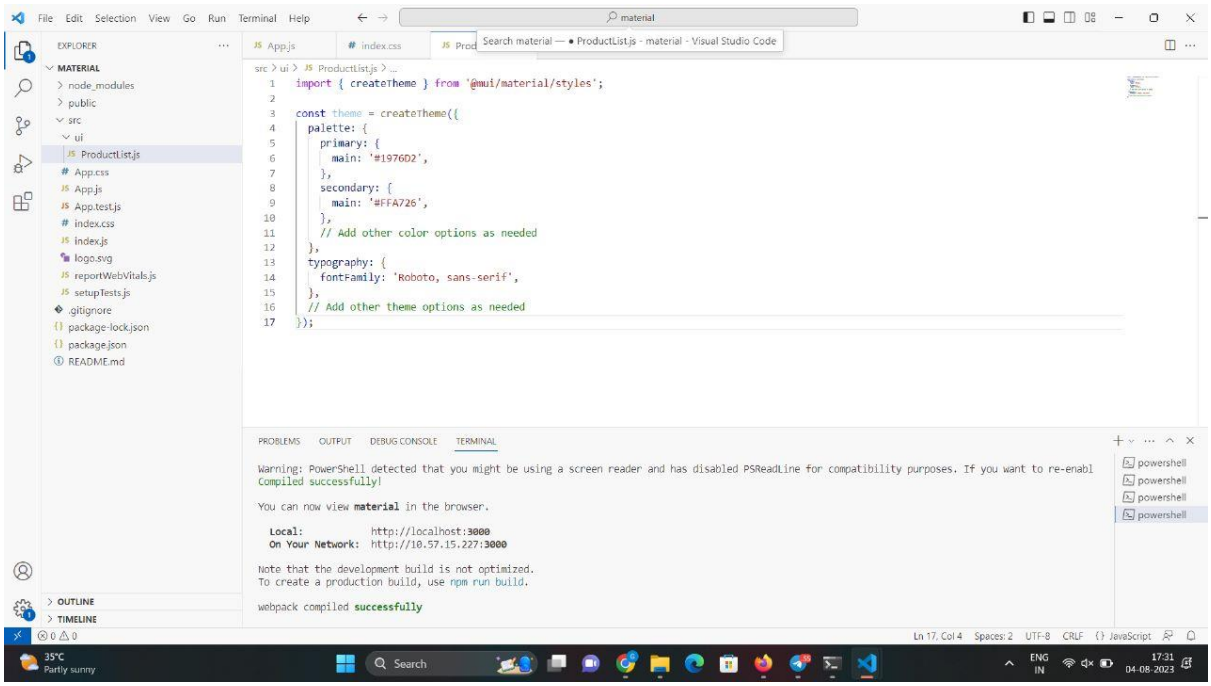


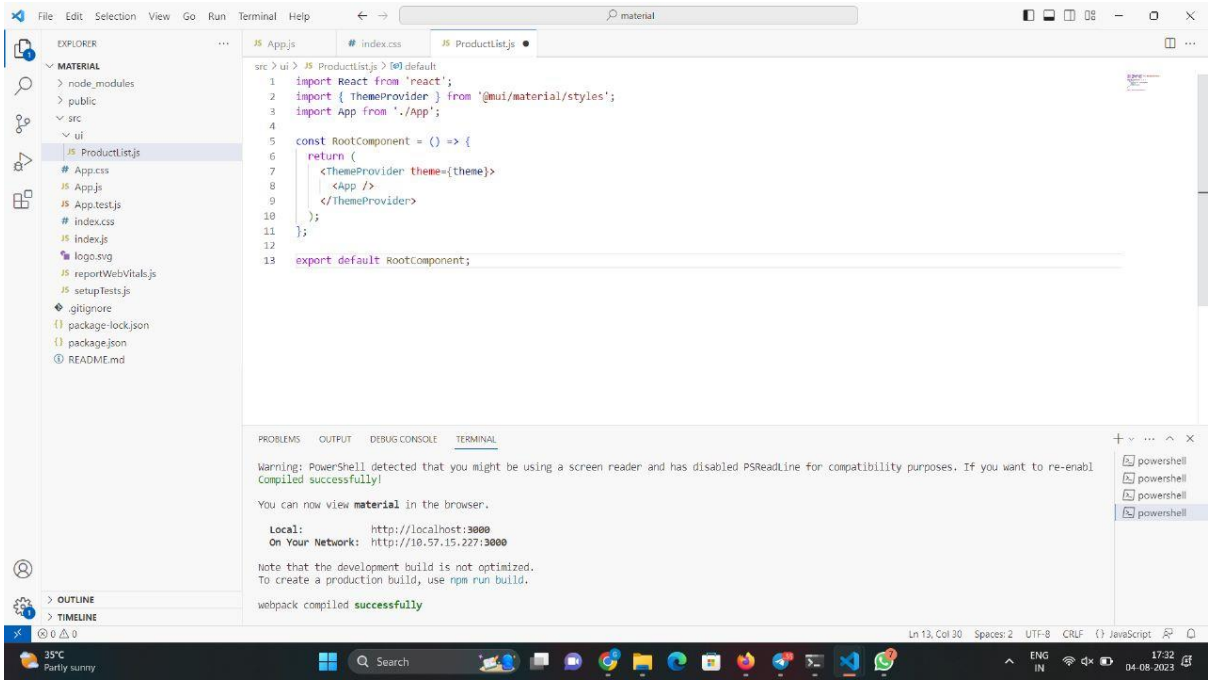




POST LAB: QUESTION:2

How can you implement nested routes in React Router to create a hierarchical navigation Structure.

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material
EXPLORER
MATERIAL
node_modules
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ProductList.js
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App.test.js
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index.js
logo.svg
reportWebVitals.js
setupTests.js
.gitignore
package-lock.json
package.json
README.md
OUTLINE
TIMELINE
App.js
index.css
ProductList.js
src > ui > ProductList.js > default
1 import React from 'react';
2 import { ThemeProvider } from '@mui/material/styles';
3 import App from './App';
4
5 const RootComponent = () => {
6 return (
7 <ThemeProvider theme={theme}>
8 <App />
9 </ThemeProvider>
10);
11 };
12
13 export default RootComponent;
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Warning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enabl
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webpack compiled successfully
powershell
powershell
powershell
powershell
Ln 13, Col 30 Spaces: 2 UTF-8 CRLF {} JavaScript
35°C
Partly sunny
Search
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04-08-2023