

Practical-11

```

1  function getTime() {
2      return new Date().toLocaleTimeString();
3  }
4
5  function fetchDataFromAPI(callback) {
6      console.log(`[${getTime()}] Fetching data from API...`);
7      setTimeout(() => {
8          const data = { id: 1, name: "Trith", role: "Cyber Security Engineer" };
9          console.log(`[${getTime()}] Data retrieved!`);
10         callback(data);
11     }, 2000);
12 }
13
14 function displayData(data) {
15     console.log(`[${getTime()}] Displaying Data:`, data);
16 }
17
18 fetchDataFromAPI(displayData);
19
20 function fetchUser(callback) {
21     console.log(`[${getTime()}] Starting user data fetch...`);
22     setTimeout(() => {
23         console.log(`[${getTime()}] User data fetched`);
24         callback({ userId: 101, username: "JohnDoe" });
25     }, 1000);
26 }
27
28 function fetchPosts(user, callback) {
29     console.log(`[${getTime()}] Fetching posts for ${user.username}...`);
30     setTimeout(() => {
31         console.log(`[${getTime()}] Posts fetched for ${user.username}`);
32         callback(["Post 1", "Post 2", "Post 3"]);
33     }, 3000);
34 }
35
36 function displayPosts(posts) {
37     console.log(`[${getTime()}] User Posts:`, posts);
38 }
39
40 fetchUser((user) => {
41     fetchPosts(user, (posts) => {
42         displayPosts(posts);
43     });
44 });
45

```

Practical-12

```

1  const fs = require("fs");
2  function readFileContent(filePath, callback) {
3      fs.readFile(filePath, "utf8", (err, data) => {
4          if (err) {
5              console.log("Error reading file:", err.message);
6              return;
7          }
8          callback(data);
9      });
10 }
11
12 function displayContent(content) {
13     console.log("File Content:\n" + content);
14 }
15
16 readFileContent("file1.txt", displayContent);
17

```

Practical-13

```
1  function fetchDataFromAPI() {
2    return new Promise((resolve, reject) => {
3      console.log("Fetching data from API...");
4      setTimeout(() => {
5        const success = true;
6        if (success) {
7          resolve({ id: 1, name: "Tirth", role: "Cyber Security Engineer" });
8        } else {
9          reject("API request failed!");
10       }
11     }, 2000);
12   });
13 }

14
15 fetchDataFromAPI()
16   .then((data) => {
17     console.log("Data received:", data);
18   })
19   .catch((error) => {
20     console.error("Error:", error);
21   });
22
```

Practical-14

```
1  async function getAllData() {
2    try {
3      console.log("Fetching weather data...");
4      const weatherRes = await fetch("https://api.open-meteo.com/v1/forecast?latitude=20&longitude=78&current_weather=true");
5      const weatherData = await weatherRes.json();
6      console.log("Weather Data:", weatherData);
7
8      console.log("Fetching news data...");
9      const newsRes = await fetch("https://newsapi.org/v2/top-headlines?country=in&apiKey=YOUR_NEWSAPI_KEY");
10     const newsData = await newsRes.json();
11     console.log("News Data:", newsData);
12
13     console.log("Merging data...");
14     const mergedData = { weather: weatherData, news: newsData };
15     console.log("Merged Data:", mergedData);
16
17   } catch (error) {
18     console.error("Error fetching data:", error);
19   }
20 }
21
22 getAllData();
```