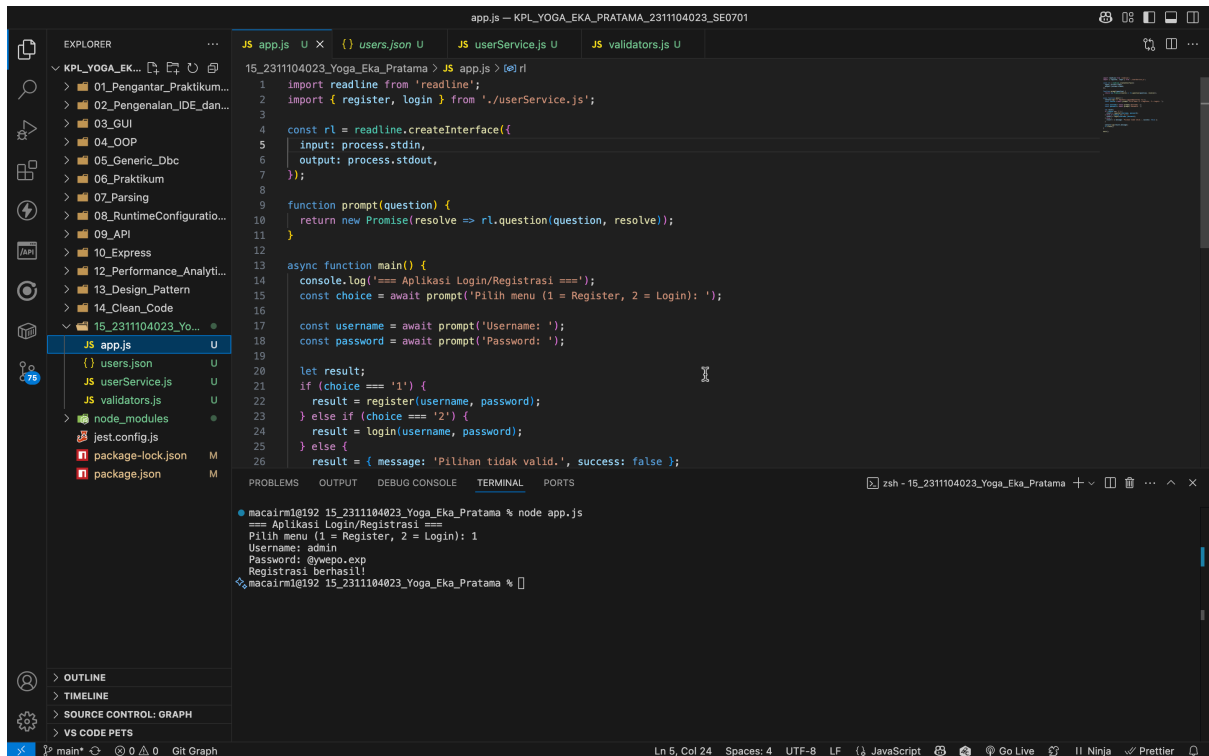


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Modul 15

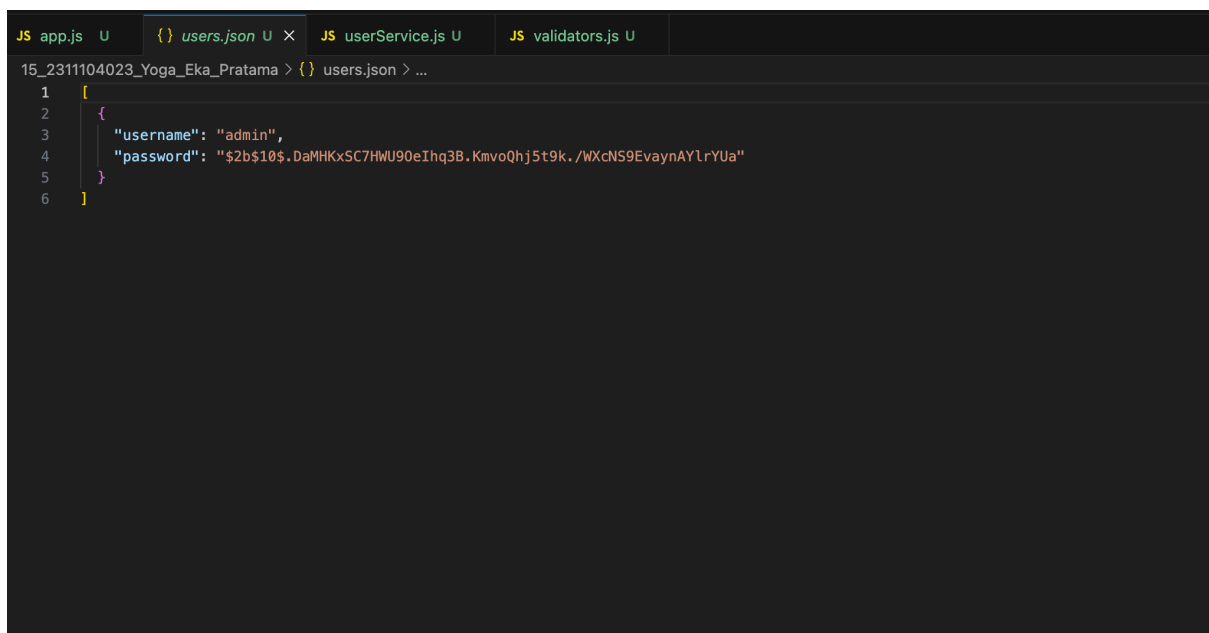


The screenshot shows a VS Code editor with the file explorer on the left, displaying a project structure with folders like '01_Pengantar_Praktikum...', '02_Pengenalan_IDE_dan...', '03_GUI', '04_OOP', '05_Generic_Dbc', '06_Praktikum', '07_Parsing', '08_RuntimeConfiguratio...', '09_API', '10_Express', '12_Performance_Analyti...', '13_Design_Pattern', '14_Clean_Code', and '15_2311104023_Yo...'. The file 'app.js' is selected. The main editor shows the code for 'app.js', which includes imports for 'readline', 'register', and 'login' from './userService.js'. The code defines a 'prompt' function, a 'main' function, and a 'register' function. The terminal output shows the execution of 'node app.js', which prompts for a menu choice (1 for Register, 2 for Login), a username, and a password. The output shows that the user chose to register with the username 'admin' and password '@ywepe.exp', and the registration was successful.

```
15_2311104023_Yoga_Eka_Pratama > JS app.js > @rl
1 import readline from 'readline';
2 import { register, login } from './userService.js';
3
4 const rl = readline.createInterface({
5   input: process.stdin,
6   output: process.stdout,
7 });
8
9 function prompt(question) {
10   return new Promise(resolve => rl.question(question, resolve));
11 }
12
13 async function main() {
14   console.log('== Aplikasi Login/Registrasi ==');
15   const choice = await prompt('Pilih menu (1 = Register, 2 = Login): ');
16
17   const username = await prompt('Username: ');
18   const password = await prompt('Password: ');
19
20   let result;
21   if (choice === '1') {
22     result = register(username, password);
23   } else if (choice === '2') {
24     result = login(username, password);
25   } else {
26     result = { message: 'Pilihan tidak valid.', success: false };
27   }
28 }
```

```
macairm1@192 15_2311104023_Yoga_Eka_Pratama % node app.js
== Aplikasi Login/Registrasi ==
Pilih menu (1 = Register, 2 = Login): 1
Username: admin
Password: @ywepe.exp
Registrasi berhasil!
```

Sebelum registrasi tidak ada user.json, namun setelah memasukkan username dan password users.json muncul dan berisi password yg sudah di hashing seperti berikut:



The screenshot shows the 'users.json' file in the VS Code editor. The file contains a JSON object with 'username' and 'password' fields. The password is a hashed value.

```
1 {
2   "username": "admin",
3   "password": "$2b$10$.DaMHKxSC7HWU90eIhq3B.KmvoQhj5t9k./wXcNS9EvaynAYlrYUa"
4 }
5
6 }
```