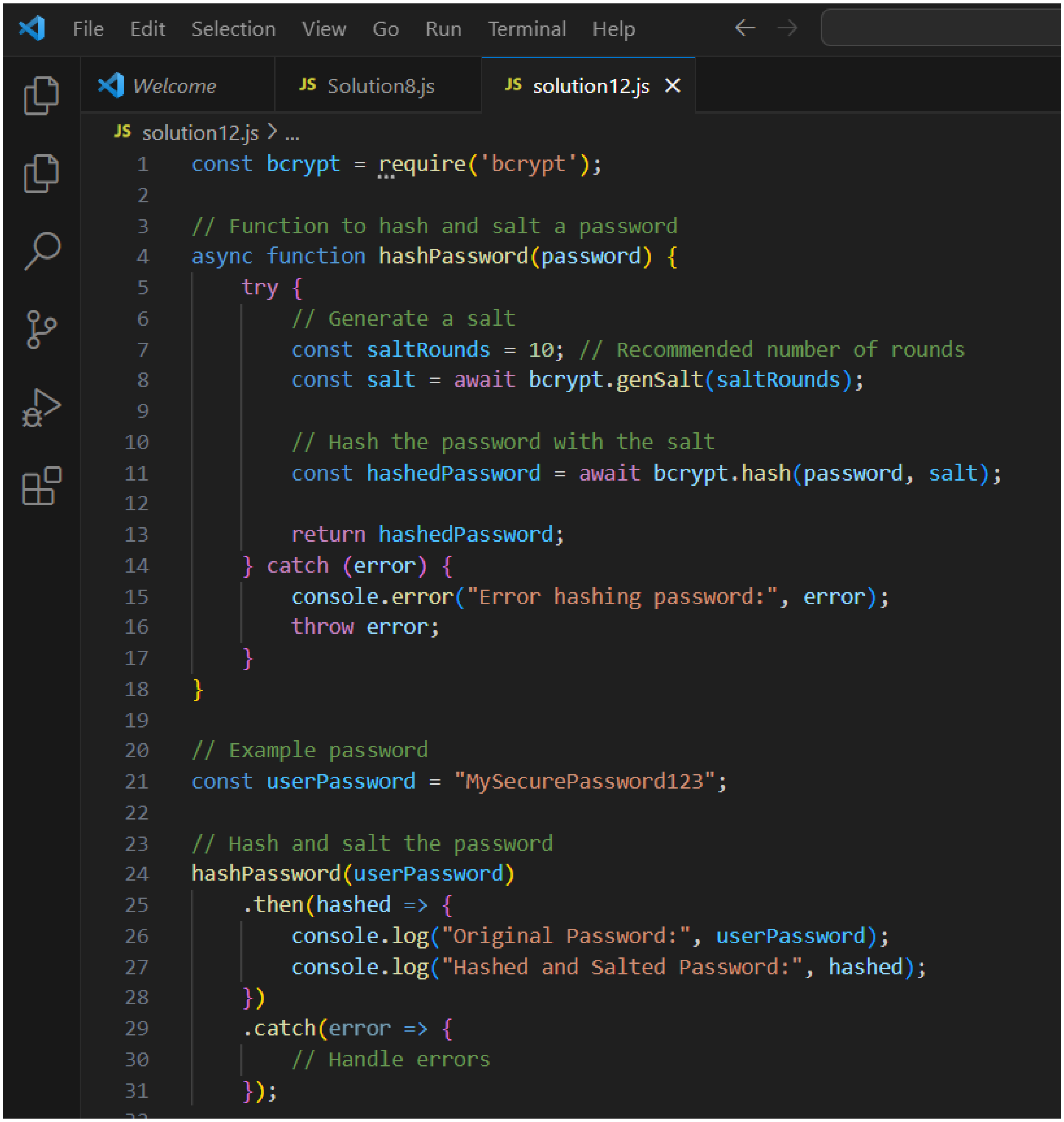
Small Questions(12)

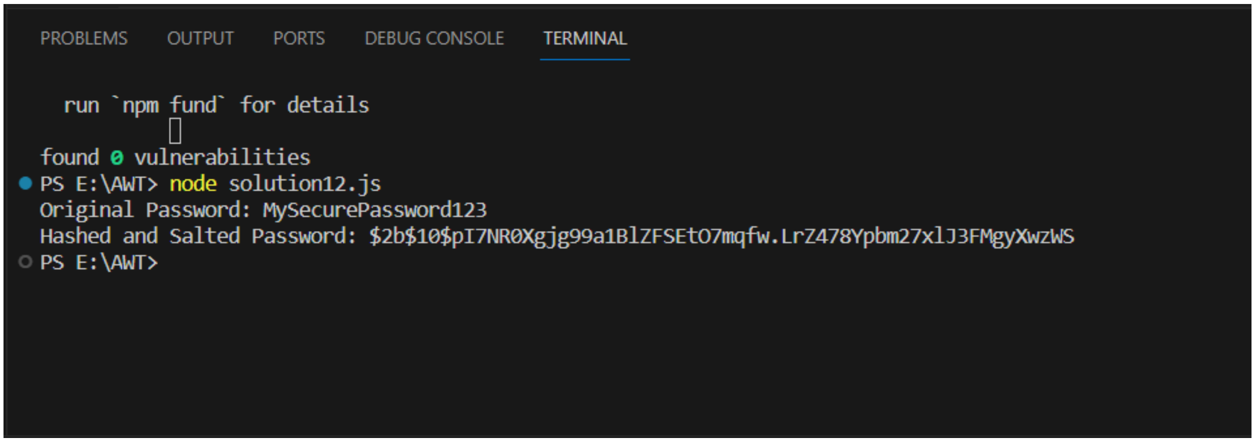
12. Enhance security by hashing and sailing user passwords before starting them in the the database (user bcrypt)

Program:



```javascript
const bcrypt = require('bcrypt');

// Function to hash and salt a password
async function hashPassword(password) {
    try {
        // Generate a salt
        const saltRounds = 10; // Recommended number of rounds
        const salt = await bcrypt.genSalt(saltRounds);

        // Hash the password with the salt
        const hashedPassword = await bcrypt.hash(password, salt);

        return hashedPassword;
    } catch (error) {
        console.error("Error hashing password:", error);
        throw error;
    }
}

// Example password
const userPassword = "MySecurePassword123";

// Hash and salt the password
hashPassword(userPassword)
    .then(hashed => {
        console.log("Original Password:", userPassword);
        console.log("Hashed and Salted Password:", hashed);
    })
    .catch(error => {
        // Handle errors
    });
```

Output:



```
  run `npm fund` for details

found 0 vulnerabilities
PS E:\AWT> node solution12.js
Original Password: MySecurePassword123
Hashed and Salted Password: $2b$10$pI7NR0Xgjg99a1BlZFSEtO7mqfw.LrZ478Ypbm27xlJ3FMgyXwzWS
PS E:\AWT>
```