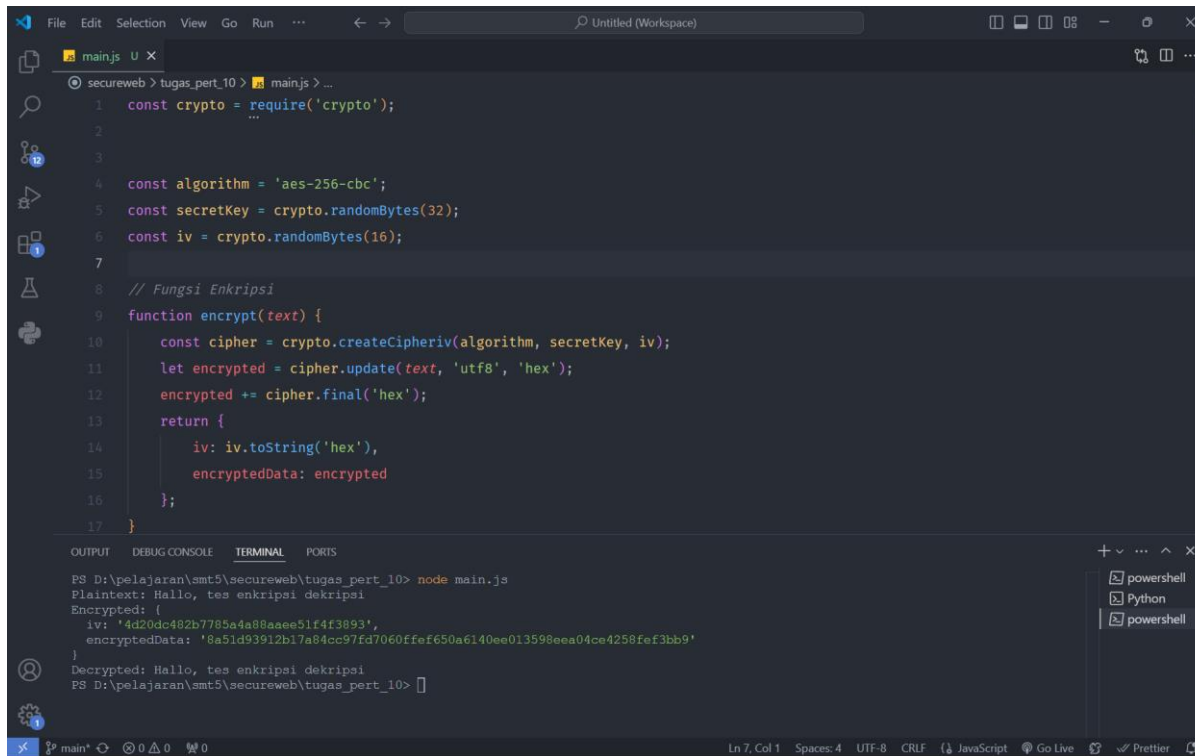


Nama: I Gusti Putu Arya Zaki Yoga Pratama

NIM: 220010117

Link code: https://github.com/aryazaki052/secureweb/tree/main/tugas_pert_10

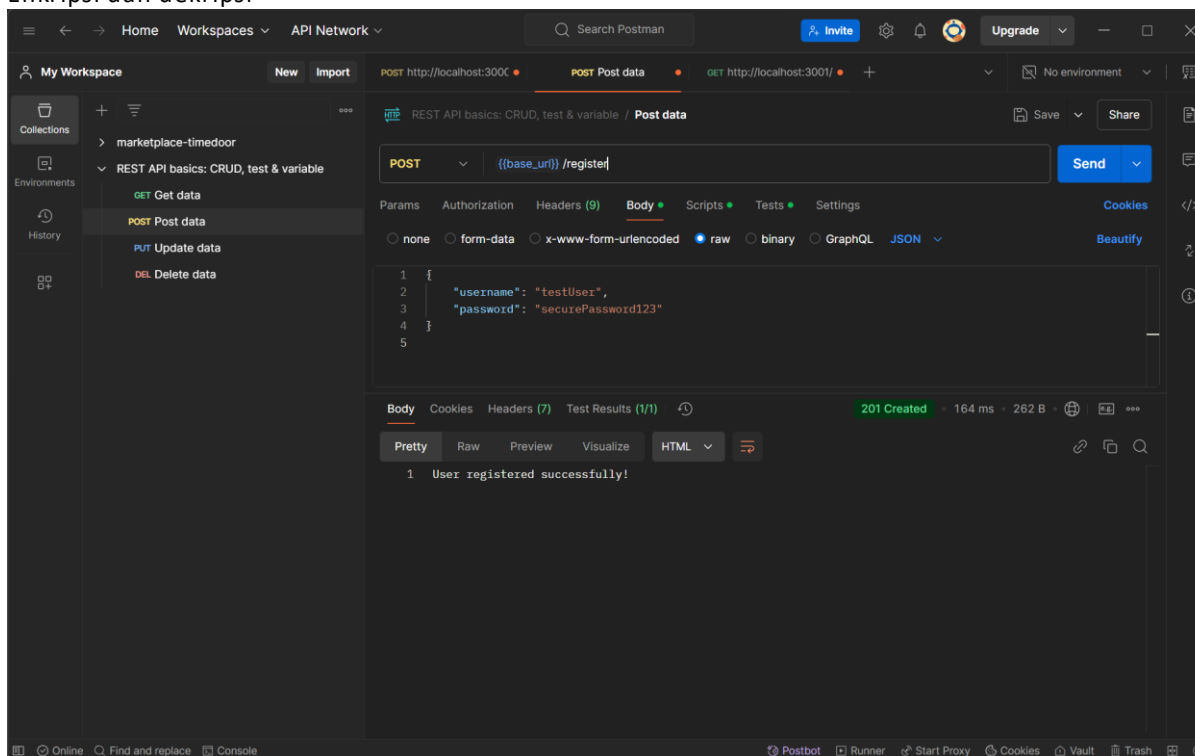


```
1  const crypto = require('crypto');
2
3
4  const algorithm = 'aes-256-cbc';
5  const secretKey = crypto.randomBytes(32);
6  const iv = crypto.randomBytes(16);
7
8  // Fungsi Enkripsi
9  function encrypt(text) {
10     const cipher = crypto.createCipheriv(algorithm, secretKey, iv);
11     let encrypted = cipher.update(text, 'utf8', 'hex');
12     encrypted += cipher.final('hex');
13     return {
14         iv: iv.toString('hex'),
15         encryptedData: encrypted
16     };
17 }
18
19 // Fungsi Dekripsi
20 function decrypt(encryptedData, iv) {
21     const decipher = crypto.createDecipheriv(algorithm, secretKey, iv);
22     let decrypted = decipher.update(encryptedData, 'hex', 'utf8');
23     decrypted += decipher.final('utf8');
24     return decrypted;
25 }
26
27 // Enkripsi
28 const encrypted = encrypt('Halo, tes enkripsi dekripsi');
29 console.log('Encrypted: ', encrypted);
30
31 // Dekripsi
32 const decrypted = decrypt(encrypted.encryptedData, encrypted.iv);
33 console.log('Decrypted: ', decrypted);
```

OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS D:\pelajaran\smt5\secureweb\tugas_pert_10> node main.js
Plaintext: Halo, tes enkripsi dekripsi
Encrypted: {
 iv: '4d20dc482b7785a4a88aee51f4f3893',
 encryptedData: '8a51d93912b17a84cc97fd7060ffef650a6140ee013598eea04ce4258fef3bb9'
}
Decrypted: Halo, tes enkripsi dekripsi
PS D:\pelajaran\smt5\secureweb\tugas_pert_10>

Enkripsi dan dekripsi



Home Workspaces API Network

My Workspace

REST API basics: CRUD, test & variable

POST http://localhost:3000/register

Body

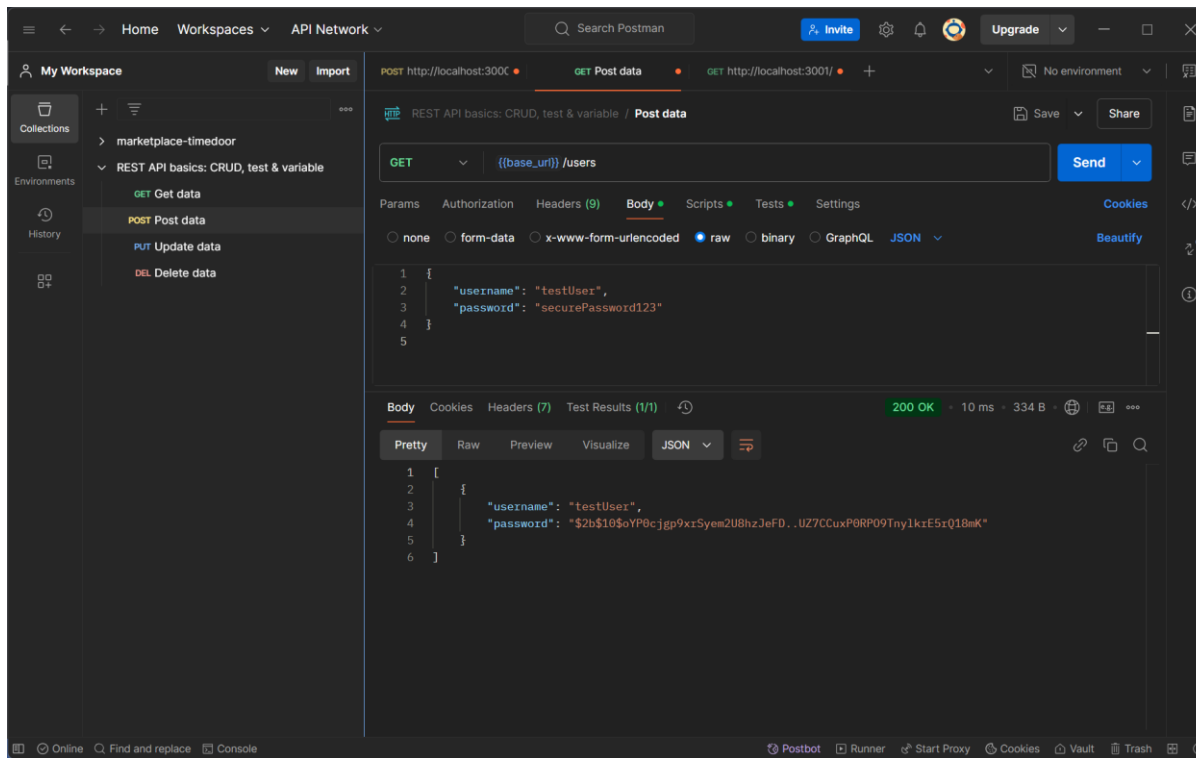
```
1 {
2   "username": "testUser",
3   "password": "securePassword123"
4 }
```

Body Cookies Headers (7) Test Results (1/1)

201 Created · 164 ms · 262 B

1 User registered successfully!

Tes login untuk hashing password



Password sudah otomatis ter hashing dengan library bcrypt