

IFB-452 KOMPUTASI AWAN AA

TUGAS 2

Database Server pada AWS



Disusun Oleh:

Hanifah Dwi Aprilianti (152022050)

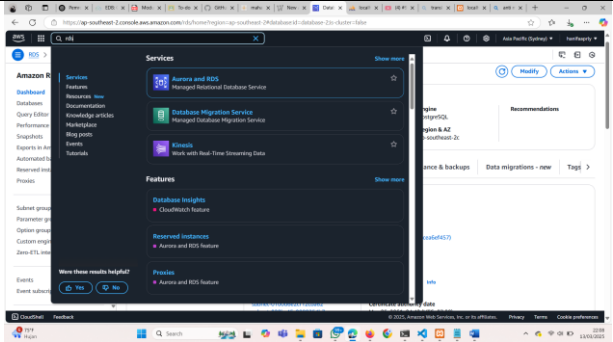
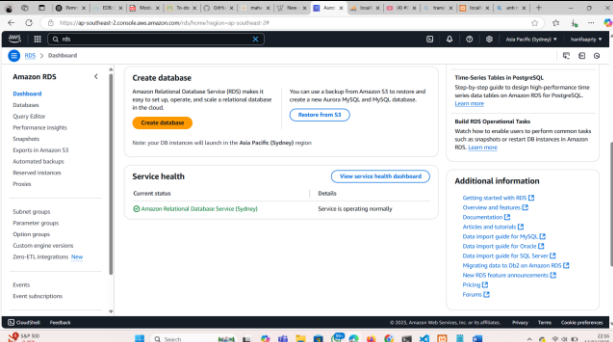
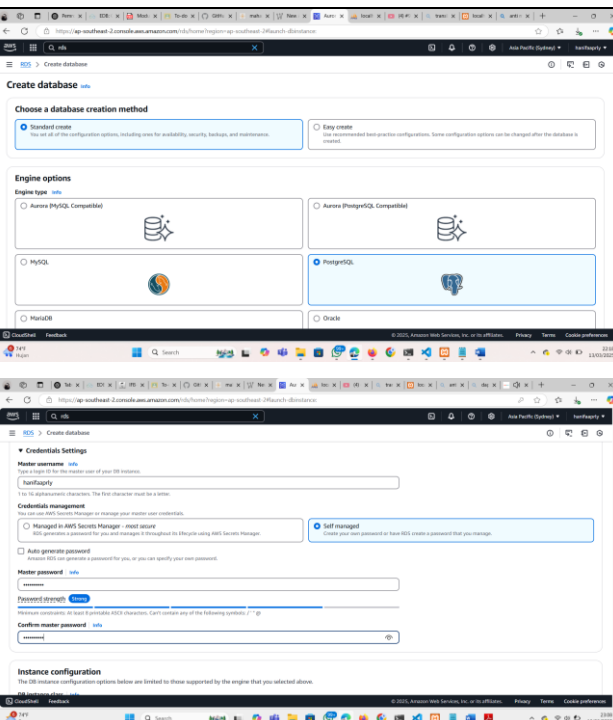
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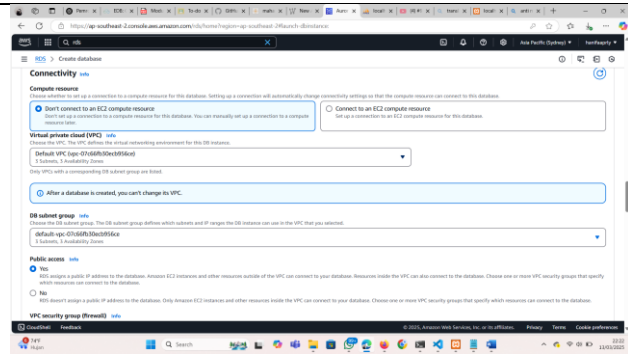
INFORMATIKA

2025

Form Input ke Database server pada AWS

Intruksi	Dokumentasi
Login akun aws, pada search bar cari “RDS”	 A screenshot of the AWS Management Console search results page. The search bar at the top contains the text 'RDS'. The results list 'Amazon RDS' as the top result, with a description: 'Amazon Relational Database Service (Amazon RDS) makes it easy to set up, operate, and scale a relational database in the cloud.' Other results include 'Database Migration Service' and 'Amazon ElastiCache'.
Create database	 A screenshot of the 'Create database' page in the AWS Management Console. The page shows the 'Create database' button, a 'Service health' section indicating that the Amazon Relational Database Service is operating normally, and a 'Time-Series Tables in PostgreSQL' section. The 'Additional information' section provides links to documentation, pricing, and forums.
Sesuaikan settingan seperti berikut, kemudian isi nama database, pengguna master, dan password (scroll ke bawah)	 A screenshot of the 'Create database' page in the AWS Management Console, showing the 'Engine options' and 'Credentials settings' sections. The 'Engine options' section shows 'PostgreSQL' selected. The 'Credentials settings' section shows 'Managed in AWS Secrets Manager' selected. The 'Master password' field is filled with 'hantafasy'. The 'Confirm master password' field is also filled with 'hantafasy'. The 'Instance configuration' section is partially visible at the bottom.

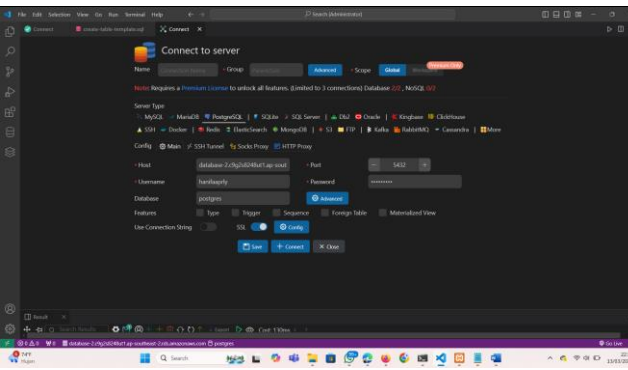
Pada connectivity, “yes” kan public access nya



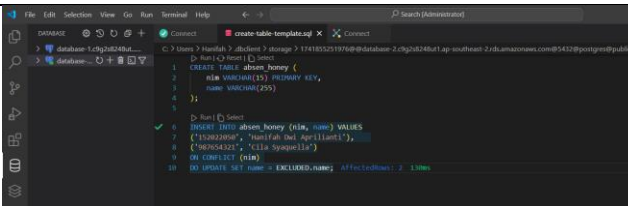
Save database tadi, kemudian edit inbound seperti ini, jika sudah save



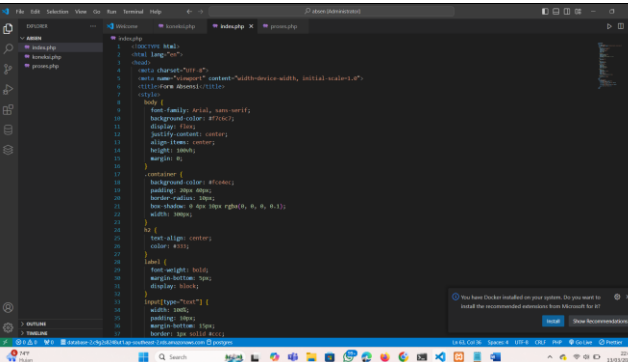
Buka vsc, lalu klik icon database pada bagian kiri vs code, lalu masukan username, password, host. Jangan lupa aktifkan SSL agar database aman dibuka. Host itu endpoint pada database yg di aws



Kemudian create table dan beri isi data seperti berikut



Buat folder yg berisi, form input (index.php) serta file proses (proses.php) disini menggunakan html php, tetapi bisa juga js, python, dll



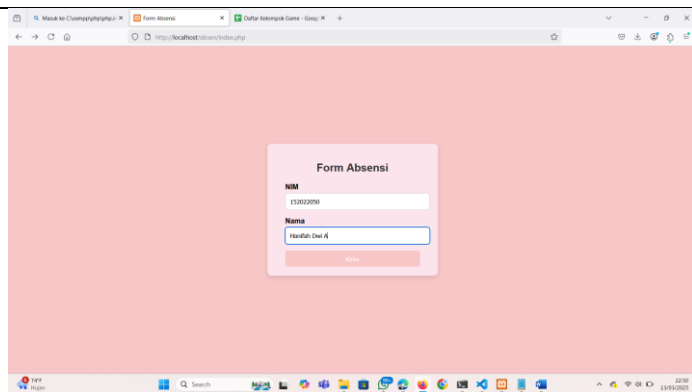
Buat juga code untuk memproses input, sebelumnya hubungkan terlebih dahulu koneksi antara form dengan aws seperti gambar berikut, isi host dengan endpoint yang terdapat pada database yg sudah dibuat di aws agar dapat terhubung, lengkapi juga user, password, dll :

```
$host = 'database-2.c9g2s8248ut1.ap-southeast-2.rds.amazonaws.com';
$port = '5432';
$dbname = 'postgres';
$user = 'hanifaaprlly';
$password = 'Sy.hnny12';
```

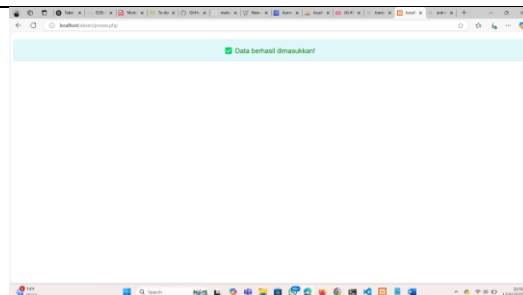
```

1 // koneksi ke database
2 $host = 'database-2.c9g2s8248ut1.ap-southeast-2.rds.amazonaws.com';
3 $port = '5432';
4 $dbname = 'postgres';
5 $user = 'hanifaaprlly';
6 $password = 'Sy.hnny12';
7
8 // koneksi ke database
9 $conn = pg_connect("host=$host port=$port dbname=$dbname user=$user password=$password");
10 if (!$conn) {
11     die("Gagal koneksi ke database: " . pg_last_error());
12 }
13
14 // query untuk mengambil data
15 $query = "SELECT * FROM absensi WHERE nim = '$nim'";
16 $result = pg_query($conn, $query);
17 if (!$result) {
18     die("Gagal mengambil data: " . pg_last_error());
19 }
20 $data = pg_fetch_all($result);
21 if (count($data) > 0) {
22     // data sudah ada
23     $nim = $data[0]['nim'];
24     $nama = $data[0]['nama'];
25     // update status
26     $query = "UPDATE absensi SET status = 'Hadir' WHERE nim = '$nim'";
27     $result = pg_query($conn, $query);
28     if (!$result) {
29         die("Gagal update status: " . pg_last_error());
30     }
31 } else {
32     // data belum ada
33     $query = "INSERT INTO absensi (nim, nama, status) VALUES ('$nim', '$nama', 'Hadir')";
34     $result = pg_query($conn, $query);
35     if (!$result) {
36         die("Gagal insert data: " . pg_last_error());
37     }
38 }
39
40 // Tampilkan data
41 $query = "SELECT * FROM absensi";
42 $result = pg_query($conn, $query);
43 if (!$result) {
44     die("Gagal mengambil data: " . pg_last_error());
45 }
46 $data = pg_fetch_all($result);
47 foreach ($data as $row) {
48     echo "NIM: " . $row['nim'] . " Nama: " . $row['nama'] . " Status: " . $row['status'] . "<br>";
49 }
50
51 // Tutup koneksi database
52 pg_close($conn);
    
```

Buka browser, inputkan nim dan nama lalu send



Data berhasil dimasukan



Cek apakah data pada database aws postgresSQL sudah masuk atau belum, ketik syntax di cmd seperti pada gambar berikut dengan memasukan endpoint aws serta user dan dbname nya.

```

C:\Program Files\PostgreSQL\16\bin>psql -h database-2.c9g2s8248ut1.ap-southeast-2.rds.amazonaws.com -p 5432 -U hanifaaprlly -d postgres
Password for user hanifaaprlly:

psql (16.3, server 17.2)
WARNING: psql major version 16, server major version 17.
Some psql features might not work.
WARNING: console code page (437) differs from windows code page (1252)
8-bit characters might not work correctly. See psql reference
page "Notes for Windows users" for details.
SSL connection (protocol: TLSv1.3, cipher: TLS_AES_256_GCM_SHA384, compression: off)
Type "help" for help.
    
```

<p>“psql -h database-2.c9g2s8248ut1.ap-southeast-2.rds.amazonaws.com -p 5432 -U hanifaaprlly -d postgres”</p> <p>Lalu masukan password yg sudah di buat di aws</p>																																					
<p>Maka akan muncul isi data pada tabel seperti ini, dan data yg baru di inputkan berhasil masuk dan terhubung.</p>	<pre>postgres-> SELECT * FROM absen_honey;</pre> <table><tr><th>nim</th><th>name</th><th>create_time</th></tr><tr><td>152022050</td><td>Hanifah Dwi Aprilianti</td><td>2025-03-13 08:50:51.502985</td></tr><tr><td>987654321</td><td>Cila Syaquella</td><td>2025-03-13 08:50:51.502985</td></tr><tr><td>1234</td><td>bismillah yaAllah</td><td>2025-03-13 12:44:50.980109</td></tr><tr><td>12</td><td>bismillah bisa</td><td>2025-03-13 12:46:29.413298</td></tr><tr><td>152022000</td><td>Tugas 2 Honey</td><td>2025-03-13 12:53:18.804213</td></tr><tr><td>123456789</td><td>ASDFGHJKL</td><td>2025-03-13 12:55:52.732126</td></tr><tr><td>152022001</td><td>Tugas 2 Hani nih</td><td>2025-03-13 12:59:47.647356</td></tr><tr><td>5678</td><td>bisa yu</td><td>2025-03-13 13:22:29.290143</td></tr><tr><td>343456</td><td>bisa nih bismillah hani</td><td>2025-03-13 13:25:11.383603</td></tr><tr><td>23456</td><td>hanihanihani</td><td>2025-03-13 13:26:40.462086</td></tr><tr><td>1520220500</td><td>hanifah dwi cantik</td><td>2025-03-13 13:28:05.147884</td></tr></table> <p>(11 rows)</p> <pre>postgres-></pre>	nim	name	create_time	152022050	Hanifah Dwi Aprilianti	2025-03-13 08:50:51.502985	987654321	Cila Syaquella	2025-03-13 08:50:51.502985	1234	bismillah yaAllah	2025-03-13 12:44:50.980109	12	bismillah bisa	2025-03-13 12:46:29.413298	152022000	Tugas 2 Honey	2025-03-13 12:53:18.804213	123456789	ASDFGHJKL	2025-03-13 12:55:52.732126	152022001	Tugas 2 Hani nih	2025-03-13 12:59:47.647356	5678	bisa yu	2025-03-13 13:22:29.290143	343456	bisa nih bismillah hani	2025-03-13 13:25:11.383603	23456	hanihanihani	2025-03-13 13:26:40.462086	1520220500	hanifah dwi cantik	2025-03-13 13:28:05.147884
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