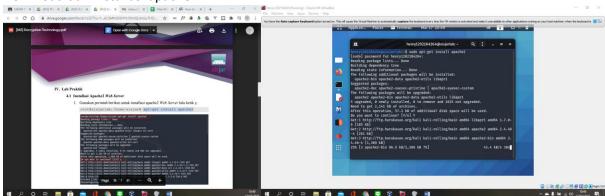
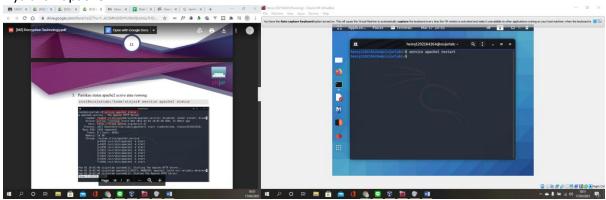
Lab Praktik 4.1

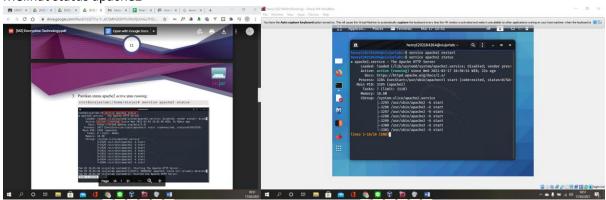
1. Download dan installasi apache2



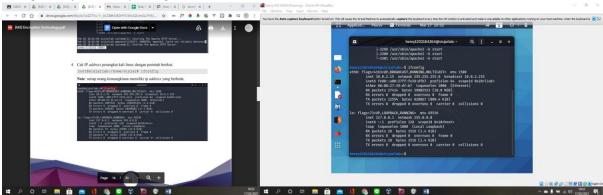
2. Nyalakan apache2



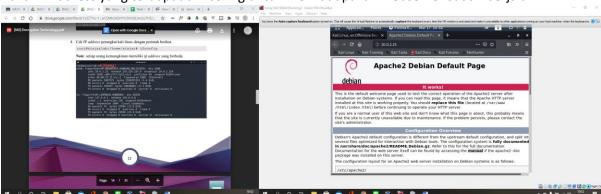
3. Melihat status apache2



4. Mengecek ipaddress perangkat virtual box saat ini

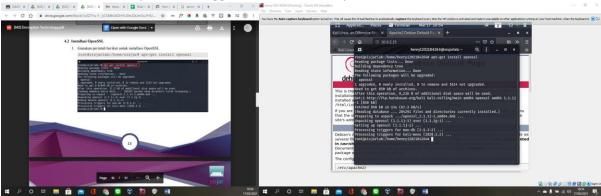


5. Buka IP Address yang terdapat di ifconfig untuk melihat apakah webserver sudah berjalan



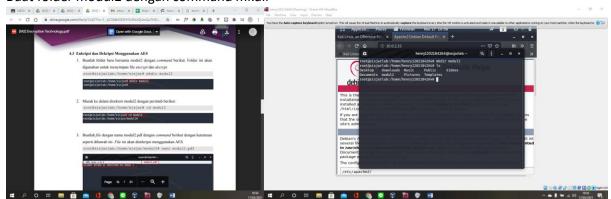
Lab Praktik 4.2: Instalasi OpenSSL

1. Download dan install OpenSSL menggunakan command apt-install



Lab Praktik 4.3: Enkripsi dan Dekripsi mengggunakan AES

1. Buat folder modul2 dengan command mkdir



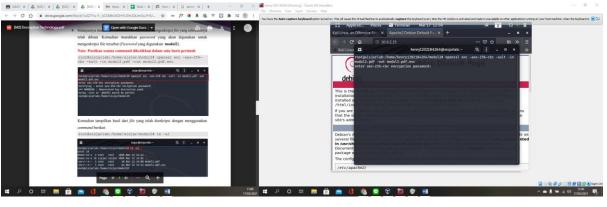
2. Masuk ke folder modul2 dengan command cd

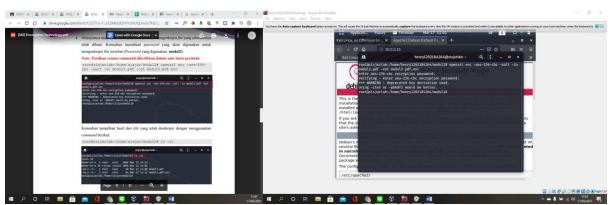


3. Buat file modul2.pdf dan edit file menggunakan texteditor Nano

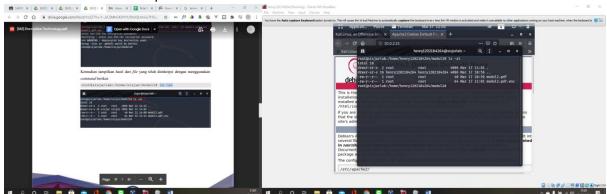


 ${\bf 4.} \quad {\bf Enkripsi\ password\ menggunakan\ Open SSL\ ,\ dengan\ password\ modul 2}$

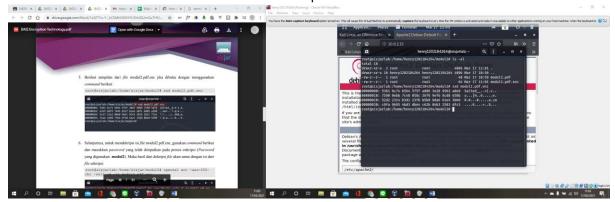




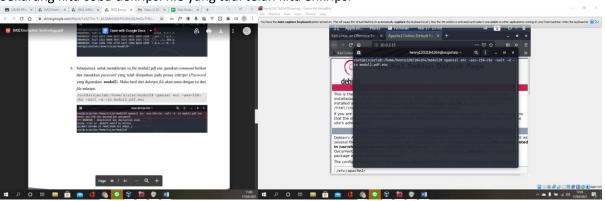
5. Berikut adalah hasil enkripsi dari file modul2

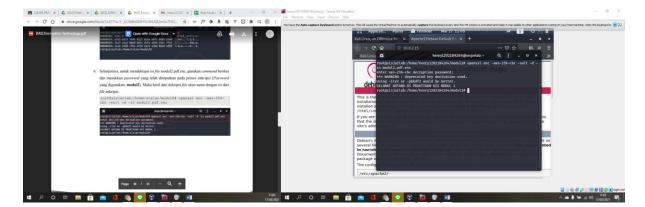


6. Jika file modul2 tersebut dibuka dengan command xxd, hasilnya adalah : XXD adalah command untuk memberikan hex dump dari file



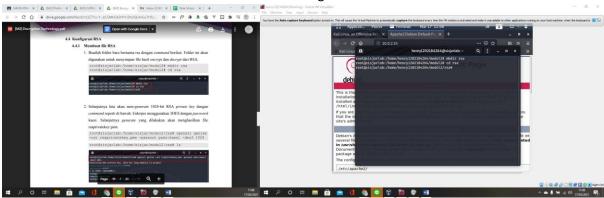
7. Sekarang kita coba dekripsi file yang tadi telah kita enkripsi



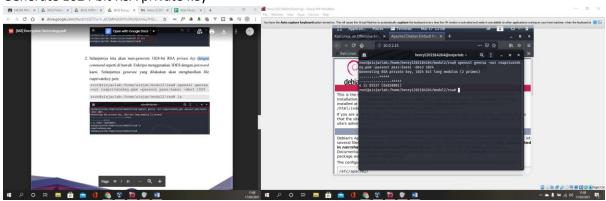


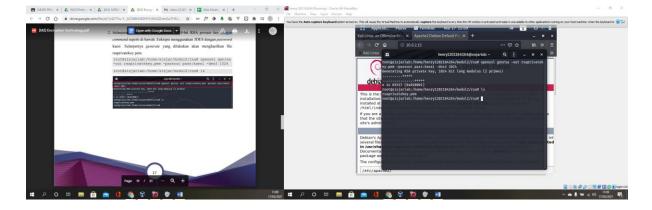
Lab Praktik 4.4 : Konfigurasi RSA

1. Buat folder RSA dan masuklah ke folder tersebut dengan mkdir dan cd

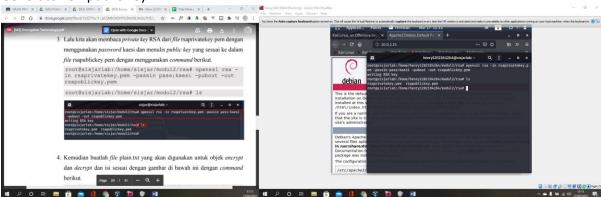


2. Generate 1024 bit RSA private key

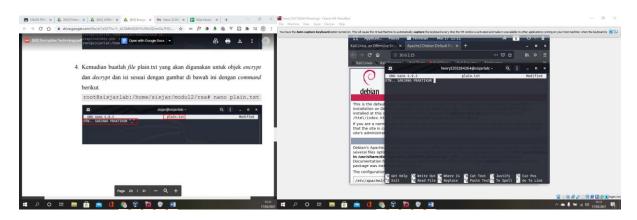




3. Generate RSA public key

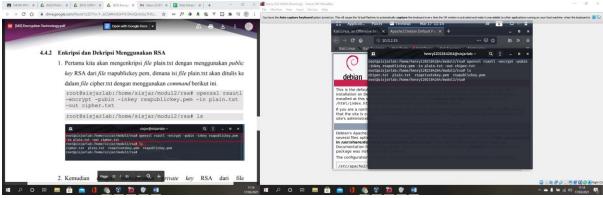


4. Buat file dengan nano untuk nanti dienkrip dan decypt

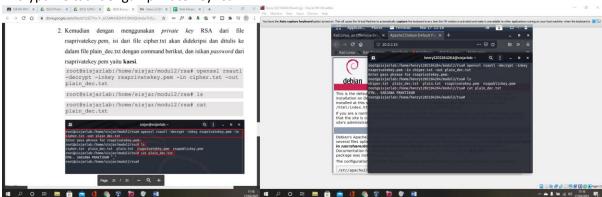


4.4.2 Enkripsi dan Dekripsi Menggunakan RSA

1. Enkripsi file plain.txt dengan public key



2. Encrypt file tadi dengan private key rsa



Membuat Signature dengan RSA

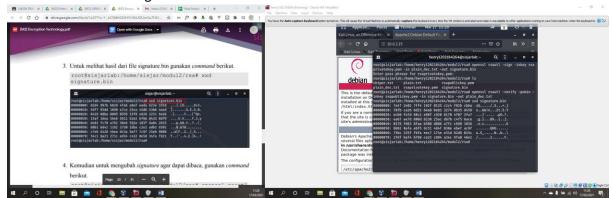
1. Buat plain_dec.txt untuk diberi digital signature



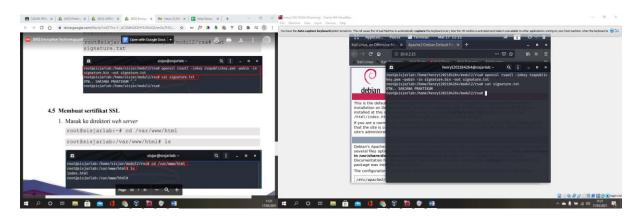
2. Verifikasi signature dengan public key



3. Melihat hasil dari file signature

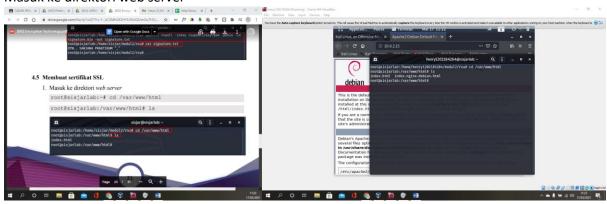


4. Ubah signature agar bisa dibaca

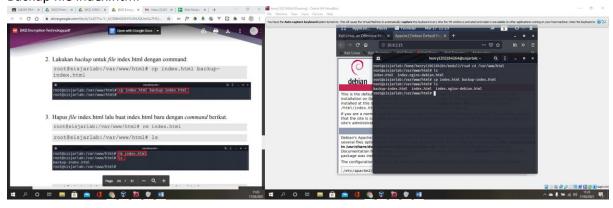


4.5 Membuat Sertifikat SSL

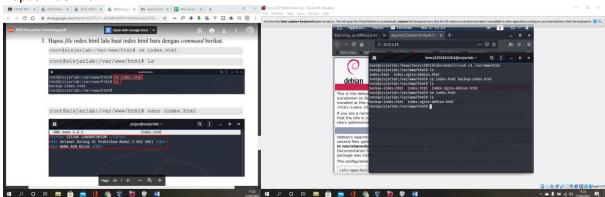
1. Masuk ke direktori web server



2. Backup file index.html



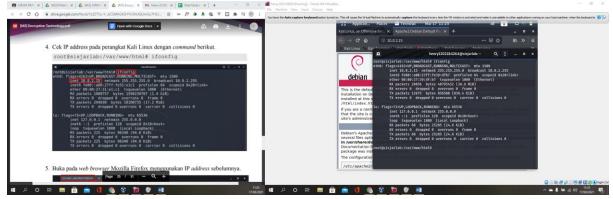
3. Hapus index.html



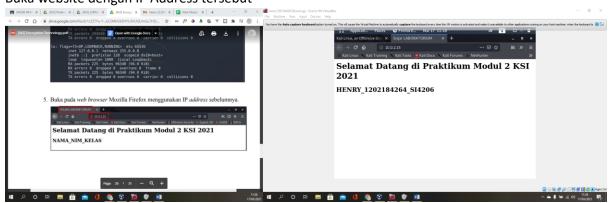
Buat index.html baru:



4. Cek IP Address

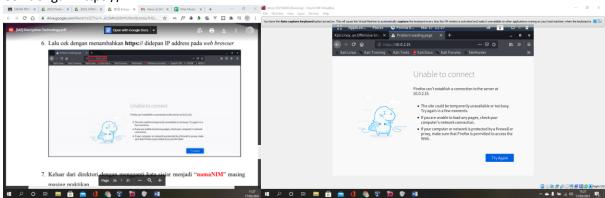


5. Buka website dengan IP Address tersebut

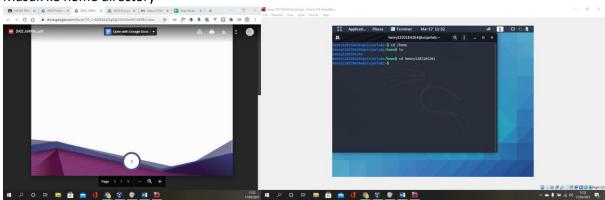


Dapat dilihat SSL belum active, ditandai dengan munculnya tanda seru disamping kiri URL, jika sudah aktif, yang muncul adalah tanda gembok

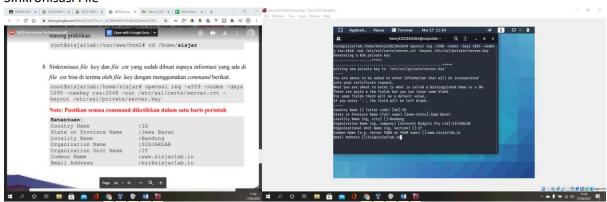
6. Cek dengan https://



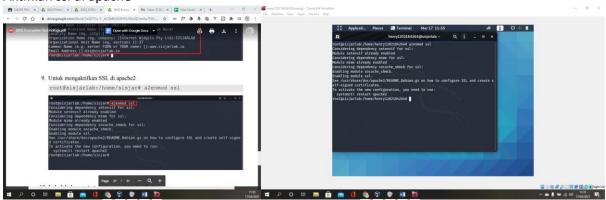
7. Masuk ke home directory



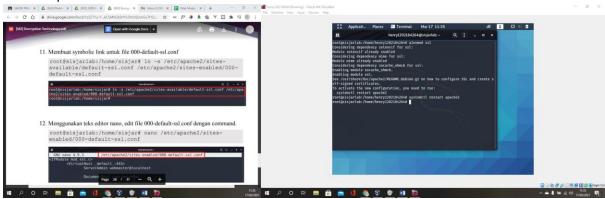
8. SInkronisasi File



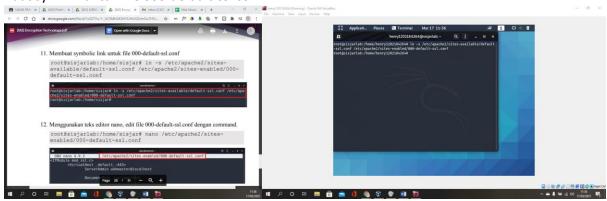
9. Aktifkan ssl di apache



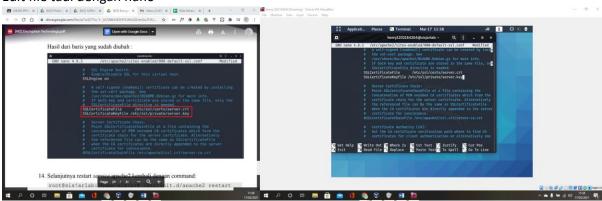
10. Restart apache2



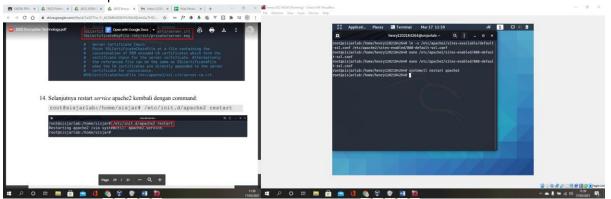
11. Buat symlink untuk file 000-default-ssl.conf



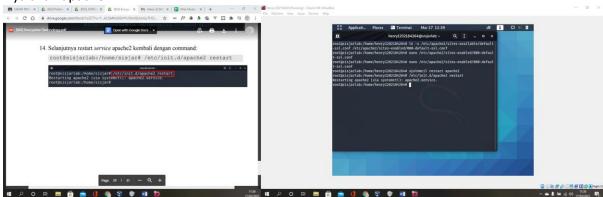
12. Edit file tadi dengan nano



13. Restart kembali apache2



14. Nyalakan apache2



15. Berikut hasil instalasi Sertifikat SSL

