

## DAFTAR ISI

HALAMAN JUDUL .....	ii
HALAMAN PENGESAHAN .....	iii
PERNYATAAN KEASLIAN PENELITIAN .....	iv
KATA PENGANTAR .....	v
DAFTAR ISI .....	vii
DAFTAR GAMBAR .....	ix
DAFTAR TABEL.....	xi
INTISARI.....	xii
ABSTRACT .....	xiii
BAB I PENDAHULUAN .....	1
1.1 Latar Belakang .....	1
1.2 Rumusan Masalah .....	3
1.3 Batasan Masalah .....	4
1.4 Tujuan Penelitian .....	4
1.5 Manfaat Penelitian.....	4
1.6 Sistematika Penulisan .....	5
BAB II TINJAUAN PUSTAKA .....	6
2.1 Tinjauan Pustaka .....	6
2.2 Landasan Teori.....	14
2.2.1 Keamanan Data .....	14
2.2.2 Sistem Autentikasi .....	15
2.2.3 Kriptografi.....	16
2.2.4 Algoritma Caesar Cipher .....	19
2.2.5 Algoritma Vigenere Cipher .....	21
2.2.6 Algoritma AES ( <i>Advanced Encryption Standard</i> ) .....	24
2.3 Hipotesis .....	30
BAB III METODE PROYEK AKHIR .....	31
3.1 Bahan.....	31
3.2 Peralatan .....	31
3.3 Tahapan Penelitian .....	32
3.4 Rancangan Program .....	34
3.4.1 Alur Kerja Algoritma .....	35
3.4.2 Program Algoritma Caesar Cipher .....	38



3.4.3 Program Algoritma Vigenere Cipher .....	40
3.4.4 Program Algoritma AES .....	42
3.4.5 Rancangan Masukan dan Keluaran Program .....	46
3.4.6 Program Sistem Autentikasi Sederhana .....	46
<b>BAB IV HASIL PENELITIAN DAN PEMBAHASAN .....</b>	<b>48</b>
4.1 Hasil Penelitian .....	48
4.1.1 Algoritma Caesar Cipher .....	48
4.1.2 Algoritma Vigenere Cipher .....	49
4.1.3 Algoritma AES .....	51
4.1.4 Algoritma Caesar Cipher – Vigenere Cipher .....	52
4.1.5 Algoritma Caesar Cipher - AES .....	53
4.1.6 Algoritma Vigenere Cipher - AES .....	55
4.1.7 Algoritma Caesar Cipher – Vigenere Cipher - AES .....	56
4.1.8 Algoritma Caesar Cipher – AES - Vigenere Cipher .....	58
4.1.9 Algoritma Vigenere Cipher - Caesar Cipher – AES .....	59
4.1.10 Algoritma Vigenere Cipher – AES - Caesar Cipher .....	61
4.1.11 Algoritma AES - Caesar Cipher - Vigenere Cipher .....	62
4.1.12 Algoritma AES - Vigenere Cipher - Caesar Cipher .....	64
4.1.13 Sistem Autentikasi Sederhana .....	65
4.2 Pembahasan .....	67
<b>BAB V PENUTUP .....</b>	<b>71</b>
5.1 Kesimpulan .....	71
5.2 Saran .....	71
<b>DAFTAR PUSTAKA .....</b>	<b>73</b>
<b>LAMPIRAN .....</b>	<b>78</b>

## DAFTAR GAMBAR

Gambar 2.1 .....	14
Gambar 2.2 .....	17
Gambar 2.3 .....	18
Gambar 2.4 .....	18
Gambar 2.5 .....	20
Gambar 2.6 .....	22
Gambar 2.7 .....	23
Gambar 2.8 .....	24
Gambar 2.9 .....	25
Gambar 2.10 .....	26
Gambar 2.11 .....	26
Gambar 2.12 .....	27
Gambar 2.13 .....	27
Gambar 2.14 .....	28
Gambar 2.15 .....	29
Gambar 2.16 .....	29
Gambar 2.17 .....	29
Gambar 3.1 .....	32
Gambar 3.2 .....	36
Gambar 3.3 .....	37
Gambar 3.4 .....	38
Gambar 3.5 .....	40
Gambar 3.6 .....	41
Gambar 3.7 .....	42
Gambar 3.8 .....	42
Gambar 3.9 .....	43
Gambar 3.10 .....	44
Gambar 3.11 .....	44
Gambar 3.12 .....	44
Gambar 3.13 .....	45



Gambar 3.14 .....	45
Gambar 4.1 .....	48
Gambar 4.2 .....	49
Gambar 4.3 .....	51
Gambar 4.4 .....	52
Gambar 4.5 .....	54
Gambar 4.6 .....	55
Gambar 4.7 .....	57
Gambar 4.8 .....	58
Gambar 4.9 .....	60
Gambar 4.10 .....	61
Gambar 4.11 .....	63
Gambar 4.12 .....	64
Gambar 4.13 .....	65
Gambar 4.14 .....	65
Gambar 4.15 .....	65
Gambar 4.16 .....	66
Gambar 4.17 .....	67
Gambar 4.18 .....	69

## DAFTAR TABEL

Tabel 2.1 .....	9
Tabel 2.2 .....	20
Tabel 3.1 .....	31
Tabel 3.2 .....	39
Tabel 4.1 .....	47
Tabel 4.2 .....	48
Tabel 4.3 .....	49
Tabel 4.4 .....	49
Tabel 4.5 .....	50
Tabel 4.6 .....	50
Tabel 4.7 .....	51
Tabel 4.8 .....	52
Tabel 4.9 .....	53
Tabel 4.10 .....	53
Tabel 4.11 .....	54
Tabel 4.12 .....	55
Tabel 4.13 .....	56
Tabel 4.14 .....	56
Tabel 4.15 .....	57
Tabel 4.16 .....	58
Tabel 4.17 .....	59
Tabel 4.18 .....	59
Tabel 4.19 .....	60
Tabel 4.20 .....	61
Tabel 4.21 .....	62
Tabel 4.22 .....	62
Tabel 4.23 .....	63
Tabel 4.24 .....	64
Tabel 4.25 .....	68