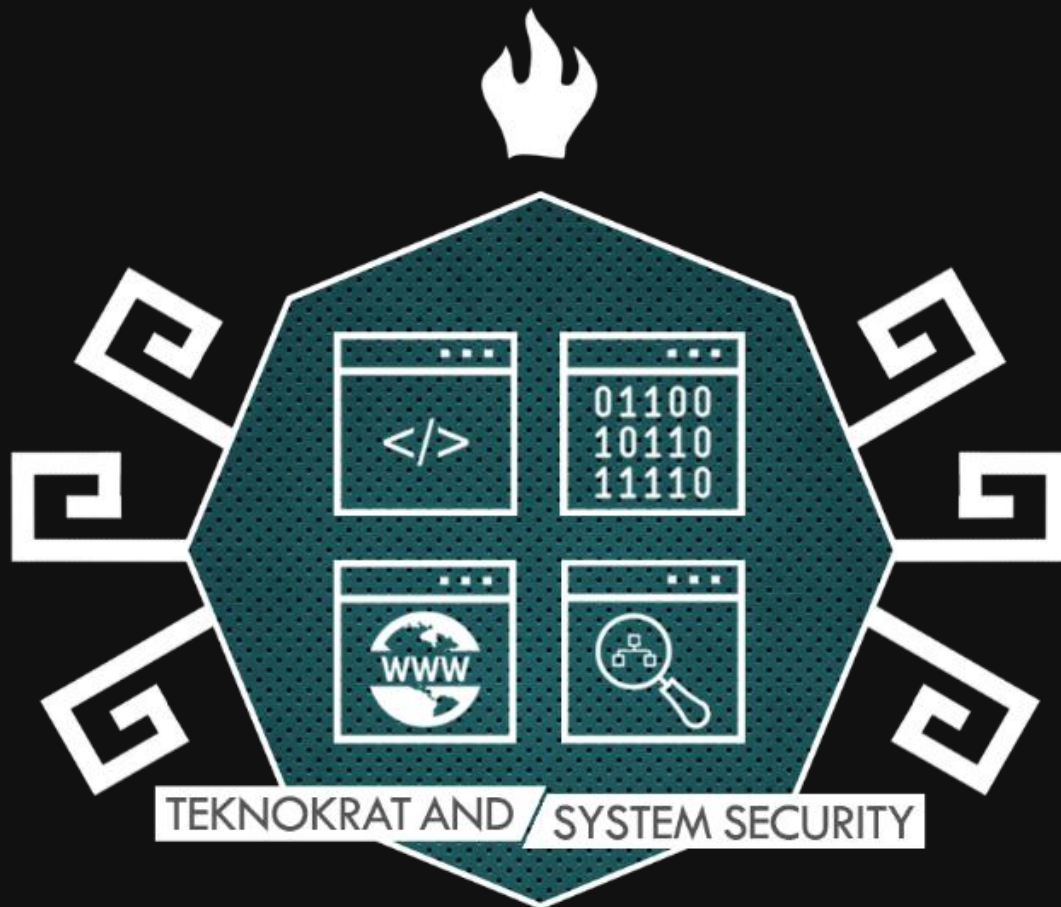
The logo features the word "TENESYS" in a bold, cyan, sans-serif font. The letter "T" is stylized with a horizontal bar extending to the left and a vertical stem that continues down the page. A second vertical line is positioned between the "E" and "N". A third vertical line starts at the top of the page and extends down, passing through the "N" and "E".

TENESYS



For001.....	3
Crypto001.....	4
Re001.....	6

Forensic	For001	20 Points
<u>Soal</u> Can you find the secret in this image? Submit <code>WhiteHat{sha1(flag)}</code>		
<u>Solusi</u> <ul style="list-style-type: none">▪ Soal berupa file gambar.▪ Buka dengan stegsolve.▪ Lakukan data extract dengan stegsolve.▪ Bit plane = Red 0, Green 0, Blue 0, Bit Order LSB First, Extract By Row.▪ Save dengan ekstensi zip.▪ Extract file zip.▪ Terdapat kode morse pada file document.xml di folder word.▪ Lakukan decode.▪ Flag berhasil didapat.		
Flag adalah <code>WhiteHat{1f0aa393d3e5369f391c35a793bcf1178b8299a0}</code>		

Crypto	Crypto001	30 Points
<p><u>Soal</u></p> <p>"The text message has been encrypted using one time pad algorithm. Let decrypt it.</p> <p>Submit WhiteHat{sha1(flag)}</p>		
<p><u>Solusi</u></p> <ul style="list-style-type: none"> ▪ Pesan di enskripsi menggunakan metode xor dengan key yang sama kemudian diencode ke dalam bentuk hex. ▪ Tiap baris pesan memiliki panjang 46 karakter. ▪ Kemungkinan key adalah flagnya, 50%. 		
<p>C = Ciphertext M = Plaintext</p> <p>C1 ^ C2 == M1 ^ M2</p>		
<pre>#!/usr/bin/python def strxor(s1,s2): return ''.join(chr(ord(a) ^ ord(b)) for a,b in zip(s1,s2)) texts = ['0e4f0c054e4a0c034d430c031454034f0106010019071149040b5941466c0 d1141100c000859540a0a440f09124b', '0b060901000b031540590a4f1a460 00a071d44591b1d45414b161c4d4f220154430e080007455a482c54f41f4104 ', '0e094f1d4f1f4f114d451c1f554f084f190702455409094c4b1c165b003b 0c184c46010f12455409174546081302', '0b0a0e164e4a090d534d59161053 120a070a05595a4829491d0059484f3e45004f0208174a003c071545460a0e1 5', '141b0e1d00021a0c465200435553120e0c4e024f1b040c5303360d4f596 c0d014e011b174800071c0459460a0e08', '13070a444d0b060c015411061b4 7461b1d0f10000d07100003040f4b00380a545203040b0942111a454f084c15 0f', '21030e0300031c58016f170a2a740f021031344110370c53340b165a7f 3c000646030a1a3b521d0f0d54590a0d06'] kata = " the " KEY = "" n = 0</pre>		

```

for i in texts:
    for j in range(41):
        print      str(n)+"          "+str(j)+"          =>
"+strxor(kata,i.decode('hex')[0+j:len(kata)+j])
        n+=1

print "======"

kata = "flag"
n = 0
key = strxor(kata,texts[6].decode('hex')[0+n:len(kata)+n])
print key

print "======"

key = "Good job! you found the key. Let find the flag"
n = 0
for i in texts:
    print strxor(key,i.decode('hex')[0+n:len(key)+n])

```

Decrypted Message:

I can calculate the motion of heavenly bodies,
 Life always offers you a second chance. It's c
 If you sleep on life all you will have are dre
 Learn form yesterday. Live for today. Hope for
 Stay hungry, stay foolishStay hungry, stay foo
 The main thing that you have to remember on th
 flag is: One_Time_Pad_is_not_perfect_right?fla

Flag adalah **WhiteHat{6e6d6932cafbfdd7683d6b88c7b0a4c83c4a02ad}**

Reverse	Re001	15 Points
<p><u>Soal</u></p> <p>Can you input the lastest number in the Random Box in 1 second? Or do something else? Submit WhiteHat{shal(flag)}</p>		
<p><u>Solusi</u></p> <ul style="list-style-type: none"> ▪ File berupa file jar. ▪ Lakukan decompiler pada file soal. ▪ Pada file ConfirmBox.java terdapat fungsi yang akan menghasilkan flag. <pre> public class flag{ public static void main(String[] args){ Character[] ListChar = new Character[]{Character.valueOf('a'), Character.valueOf('_'), Character.valueOf('y'), Character.valueOf('l'), Character.valueOf('_'), Character.valueOf('l'), Character.valueOf('a'), Character.valueOf('T'), Character.valueOf(' '), Character.valueOf('T'), Character.valueOf('_'), Character.valueOf('T'), Character.valueOf('e'), Character.valueOf('_'), Character.valueOf('y'), Character.valueOf('e'), Character.valueOf('r'), Character.valueOf(' '), Character.valueOf('S'), Character.valueOf('_'), Character.valueOf('_'), Character.valueOf('l'), Character.valueOf('r'), Character.valueOf('T'), Character.valueOf('F'), Character.valueOf(' '), Character.valueOf('Y'), Character.valueOf('_'), Character.valueOf('l'), Character.valueOf('e'), Character.valueOf('T'), Character.valueOf('T'), Character.valueOf('T'), Character.valueOf('a'), Character.valueOf('r'), Character.valueOf('T'), Character.valueOf('u'), Character.valueOf('A'), Character.valueOf('o')}}; int[] ListPos; int[] arrn = new int[39]; arrn[0] = 11; arrn[1] = 7; arrn[2] = 14; arrn[3] = 13; </pre>		

[illegible]

```

Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000'),
Character.valueOf('\u0000'),      Character.valueOf('\u0000')};
    int lenFlag = ListChar.length;
    int i = 0;
    while (i < lenFlag) {
        tmpListChar[ListPos[i]] = ListChar[i];
        ++i;
    }
    i = 0;
    while (i < lenFlag) {
        flag = String.valueOf(flag) + tmpListChar[i];
        ++i;
    }
    System.out.println(flag);

}
}

```

Flag adalah **WhiteHat{1e69c12b7b2bb6b895d39c4776ef8b34489149ab}**