Aim: To implement Rail Pene cipher of transposition Techniques.

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Date: Practical No. 4

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	Aim: To implement Rail Fence appea of transposition Techniques.
ř.	The sail fence appear (something aned signay appear) in a transposition appear that jumbles up the order of the
	tetters of a message wing a basic adjointhm.  The rail fence cipies words by withing your message on atternate lines occasion the pages, and then reacting off
	For example, lest's consider the plaintest "This is a secret message".
1	plaintext: THISISASE(RETMESSAME  To encode this message we will first write over  two lines (the "zails of the fence") as follows:
1)	Rail Ferry T T T A E R T E S  Encoding H S S S C E M S F
	Mute that an white spaces have been temored from the
	plain text.  The appear in then read all by uniting the top your first,  followed by the bottom row:
	Exphasters: TIIA ERTES IN HSSSCEMSA E ciphesters: TIIA ERTES IN HSSSCEMSA E  Conclusion: The world of toursposition strain inflicts, Railferie polyphosy has been studied
	Succestally.

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	bratan;
	det encrytrainfence (text, key):
	sail = [[, Iu, fox , in sange (lev (+6x4))]
	for in range (ney)]
	dix down = False
	$\sigma_{OW}$ , $\sigma_{O} = 0.0$
	for in rance (100 (46x4)).
	1- (NOW == WOR) Pi
	dis down = nut dis-down
	[i] first = [lo] I word 1 wor
	101 +=1
	if dix-down:
	I=t wat
	else:
	1 = - yok
	[]= HULDSK
	fox in sange (nay):
	for in range (len (taxt)):
1	if rail [1][] != '\n':
1)	Tenus append (Taul Cillia)
	((Hurst Maj., "") pentert
	steetout . The state of the sta
111111111	Jel Dermandrillense (inchest. Ken):
	def decayperailience (ciphet, key):  Zoul = [['In' fax i in tange (len cipher)]
	for in large (key)]
	dix-down = More
	300, $(0) = 0,0$
	000, 01-0,0
	fux in sunge (1en (ciphet)).
	$ \frac{1}{1} + \frac{1}{10} + \frac{1}{10} = 0; $ Page No.
	4 10W 0:

: telaporo

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יים יים מו
  1- def encryptRailFence(text) key);
2    rail = [['\r' for I in runge(len(text))]
                                                                                       tilan tespisssemsae
                                                                                       thisisasecretmessage
                     for j in range(key)]
         dir_down - False
         row, col - 0, 0,
         for a in range (len(text)):
           It (row " 0) or (row " key
                dir_down " not dir_down
 111
            rail[row][col] - text[1]
            col · · 1
13
1.1 -
            if dir_down:
.5
                row er 1
            else:
12
                CCM
        result + []
7.9
14.
        Tor i in range(key):
20 -
         for j in range(len(text)):
       af rail(i][j] to 'An';
21 .
22
                    result.append(rail[i][j])
        return("" / join(result))
11
24
35. def decryptRailFence(cipher, kev):
```



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Date:
      duz-down = Trup
    if you = = Key -1:
dix - down = Falx
   1 * = [102] [wok] 1wok
   (01+=1
   if dis-down:
   1=+ wox
      1=- 2005
  index = 0
  for i in large (1ey).
      for in range (10 (ciphor)).
      if ((rail CiJCj]]=='*') and (index < len (cipher))):
            Tail Cilli = Ciprer Cindex
            index + = 1
 Territ = []
 Tow, (a) = 0,0
 fire i in range (len ccipher):
     if 2000 == 0:
      dir-down = True
      if 2000 = = 1/24 -1?
        dix-down = False
      if (rail crow) [ col] = '+'):
       zerut. append (zcúl Czou I Ccol ]
         col +=1
      : nwab-xib fi
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1 = + wor

conclusion:

The concept of transposition stateon cipier, Rail fence has been studied successfully.

Laboration .

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	Date:			
	else.			
	70 w - = 1			
	orchury (" " join (resut))			
ifname = "main":				
	Print (drayptrailfenir (" + 11 gentergh sucemsor", 2))			
C	onclusion:			
	The concept of transposition stream cipher, Roll ence cipher has been studied successfully.			
16	one aprex how been studied succentrally.			
	·			
11				



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	Wind in Jeansposition Inhinique?	
<b>→</b>	Transposition technique in a metho	to be successful to be
4	Explain how Rail fence works by The rail fence appear works by on alternate line like zig zam	- DUAT EUR . DIZELD . MUST FRUIT
1)	and men reading of each the	ne in two.
->	what is disadvantages of Rail Ferne The main disadvantages of rail are lack of security, limited vulnerability to attack. Attackes encryption by launching attacks.	effectiveness and
		Page No.