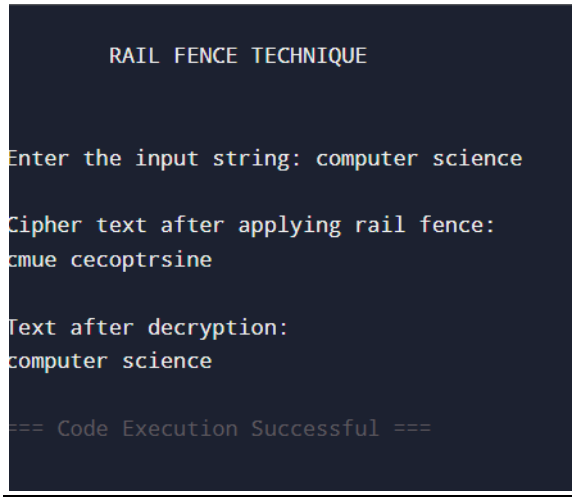
5) To write a python program to implement the rail fence transposition technique.

PROGRAM:-

```
def main():
    print("\n\t\tRAIL FENCE TECHNIQUE")
    a=input("\n\nEnter the input string: ")
    l=len(a)
    c=[]
    for i in range(0,l,2):c.append(a[i])
    for i in range(1,l,2):c.append(a[i])
    cipher_text=''.join(c)
    print("\nCipher text after applying rail fence:")
    print(cipher_text)
    d=['']*l
    k=l//2 if l%2==0 else(l//2)+1
    j=0
    for i in range(k):d[j]=cipher_text[i];j+=2
    j=1
    for i in range(k,l):d[j]=cipher_text[i];j+=2
    decrypted_text=''.join(d)
    print("\nText after decryption:")
    print(decrypted_text)
if __name__=="__main__":main()
```

OUTPUT:-


RAIL FENCE TECHNIQUE
Enter the input string: computer science
Cipher text after applying rail fence:
cmue cecoptrsine
Text after decryption:
computer science
=== Code Execution Successful ===