

main.c

```
1  #include <stdio.h>
2  #include <string.h>
3  void main() {
4      int i, j = 0, k, l;
5      char a[20], c[20], d[20];
6      printf("\n\t\tRAIL FENCE TECHNIQUE (2-Rail Zigzag)");
7      printf("\n\nEnter the input string: ");
8      gets(a); // Read input string
9      l = strlen(a); // Get length of input
10     for (i = 0; i < l; i++) {
11         if (i % 2 == 0) {
12             c[j++] = a[i];
13         }
14     }
15     for (i = 0; i < l; i++) {
16         if (i % 2 == 1) {
17             c[j++] = a[i];
18         }
19     }
20     c[j] = '\0'; // Null-terminate ciphertext
21     printf("\nCipher text after applying Rail Fence: %s", c);
22     if (l % 2 == 0)
23         k = l / 2;
24     else
25         k = (l / 2) + 1;
26     for (i = 0, j = 0; i < k; i++) {
27         d[j] = c[i];
28         j += 2;
29     }
30     for (i = k, j = 1; i < l; i++) {
31         d[j] = c[i];
32         j += 2;
33     }
34     d[l] = '\0';
35     printf("\nText after decryption: %s\n", d);
36 }
37
```

```
Enter the input string: ramana reddy  
Cipher text after applying Rail Fence: rnm edaaardy  
Text after decryption: ramana reddy  
...Program finished with exit code 0
```