1. 소스 코드
2. #include <stdio.h>
3. #define EN 3 //encrypt할 횟수를 상수 EN으로 define
4. #define RO 5 //rotate할 횟수를 상수 RO로 define
5. char \*reverse(char \*str1);
6. char \*encrypt(char \*str1, int n);
7. char \*rotate(char \*str1, int n);
8. int main()
9. {
10. char str[101];
11. printf("Enter String(more than 20 chars) :");
12. gets(str);
13. printf("string Entered :\t%s\n", str);
14. char str\_copy[101];
15. for (int i = 0; str[i] != NULL; i++)
16. {
17. str\_copy[i] = str[i];
18. str\_copy[i + 1] = NULL;
19. }
20. printf("Reversed:\t\t%s\n", reverse(str\_copy));
21. for (int i = 0; str[i] != NULL; i++)
22. {
23. str\_copy[i] = str[i];
24. str\_copy[i + 1] = NULL;
25. }
26. printf("Encrypted:\t\t%s\n", encrypt(str\_copy, EN));
27. for (int i = 0; str[i] != NULL; i++)
28. {
29. str\_copy[i] = str[i];
30. str\_copy[i + 1] = NULL;
31. }
32. printf("Rotated:\t\t%s\n", rotate(str\_copy, RO));
33. return 0;
34. }
35. char \*reverse(char \*str1)
36. {
37. int last\_index;
38. for (int i = 0; \*(str1 + i) != NULL; i++)
39. last\_index = i;
40. for (int i = 0, j = last\_index; i < j; i++, j--)
41. {
42. int temp = str1[i];
43. str1[i] = str1[j];
44. str1[j] = temp;
45. }
46. return str1;
47. }
48. char \*encrypt(char \*str1, int n)
49. {
50. for (int i = 0; \*(str1 + i) != NULL; i++)
51. {
52. if(\*(str1 + i) != ' ')
53. \*(str1 + i) += n;
54. if (\*(str1 + i) > 'Z')
55. \*(str1 + i) -= 26;
56. }
57. return str1;
58. }
59. char \*rotate(char \*str1, int n)
60. {
61. int last\_index;
62. for (int i = 0; \*(str1 + i) != NULL; i++)
63. last\_index = i;
64. for (int i = 0; i < n; i++)
65. {
66. char last\_char = \*(str1 + last\_index);
67. for (int j = last\_index; j > 0; j--)
68. {
69. \*(str1 + j) = \*(str1 + j - 1);
70. }
71. \*str1 = last\_char;
72. }
73. return str1;
74. }

2. 실행 화면

