

Aim:

Write a program to reverse the first n characters in a file.

- open a new file "TestDataFile3.txt" in read/write mode
- write the content onto the file
- read the number of characters to copy
- copy the specified number of characters into a string
- reverse the string
- overwrite the entire string into the file from the beginning
- close the file
- open the copied file "TestDataFile3.txt" in read mode
- read the text from file and print on the screen
- close the file

Source Code:

Program1506.c

```
#include <stdio.h>
#include <string.h>
void stringReverse(char[]);
void main()
{
    FILE *fp;
    int num, i;
    char ch, data[100];
    fp = fopen("TestDataFile3.txt", "w+");
    printf("Enter the text with @ at end : ");
    while ((ch = getchar()) != '@')
    {
        putc(ch, fp);
    }
    putc(ch, fp);
    printf("Enter number of characters to copy : ");
    scanf("%d", &num);
    i = 0;
    rewind(fp);
    while (i < num)
    {
        data[i] = getc(fp);
        i++;
    }
    data[i] = '\0';
    rewind(fp);
    stringReverse(data);
    fputs(data, fp);
    fclose(fp);
    fp = fopen("TestDataFile3.txt", "r");
    printf("Result is : ");
    while ((ch = getc(fp)) != '@')
    {
        putchar(ch);
    }
    printf("\n");
}
```

```

    fclose(fp);
}
void stringReverse(char data[100])
{
    int i, j;
    char temp;
    i = j = 0;
    while (data[j] != '\0')
    {
        j++;
    }
    j--;
    while (i < j)
    {
        temp = data[i];
        data[i] = data[j];
        data[j] = temp;
        i++;
        j--;
    }
}

```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter the text with @ at end : Teaching is a
very noble profession that shapes the
character, caliber and future of an individual@
Enter number of characters to copy : 18
Result is : yrev
a si gnihcaeT noble profession that shapes the
character, caliber and future of an individual

Test Case - 2
User Output
Enter the text with @ at end : Small aim
is a crime; have great aim@
Enter number of characters to copy : 11
Result is : i
mia llamSs a crime; have great aim