S.No: 33	Exp. Name: *Write a C program to Reverse first n characters in a File*	Date:2023-06-24

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 begining
- 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

```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