2022-2026-CSE-A

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

```
#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
```