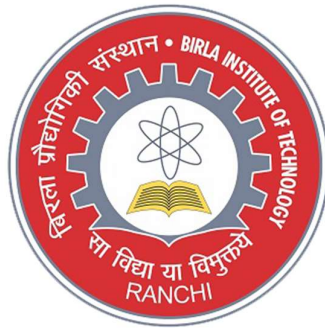


Birla Institute of Technology, Mesra,  
Patna Campus



CD-Assignment

Name-Shubham Sourabh

Roll-Btech/15044/18

Sec-CSE 6<sup>th</sup>

# Assignment-1

Q 1. Write a program to count characters, word, line of the text file using file handling. The text file also having numeric values.

## Code:-

```
C:\Users\vampirepapi\Desktop\nowhere\Codes\Cpp\1b.c - Sublime Text
File Edit Selection Find View Goto Tools Project Preferences Help

1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      FILE * file;
7      char* path = "C:\\Users\\vampirepapi\\Desktop\\nowhere\\Codes\\Cpp\\test.txt";
8      char ch;
9      int characters, words, lines;
10     file = fopen(path, "r");
11     if (file == NULL)
12     {
13         printf("\nUnable to open file.\n");
14         printf("Please check if file exists and you have read privilege.\n");
15         exit(EXIT_FAILURE);
16     }
17
18     characters = words = lines = 0;
19     printf("The content of the file %s are : \n", path);
20     while ((ch = fgetc(file)) != EOF)
21     {
22         characters++;
23         printf("%c", ch);
24         if (ch == '\n' || ch == '\0')
25             lines++;
26
27         if (ch == ' ' || ch == '\t' || ch == '\n' || ch == '\0')
28             words++;
29     }
30
31     ECC | READY | Line 43, Column 1 | Spaces: 4 | C
```

```
C:\Users\vampirepapi\Desktop\nowhere\Codes\Cpp\1b.c - Sublime Text
File Edit Selection Find View Goto Tools Project Preferences Help

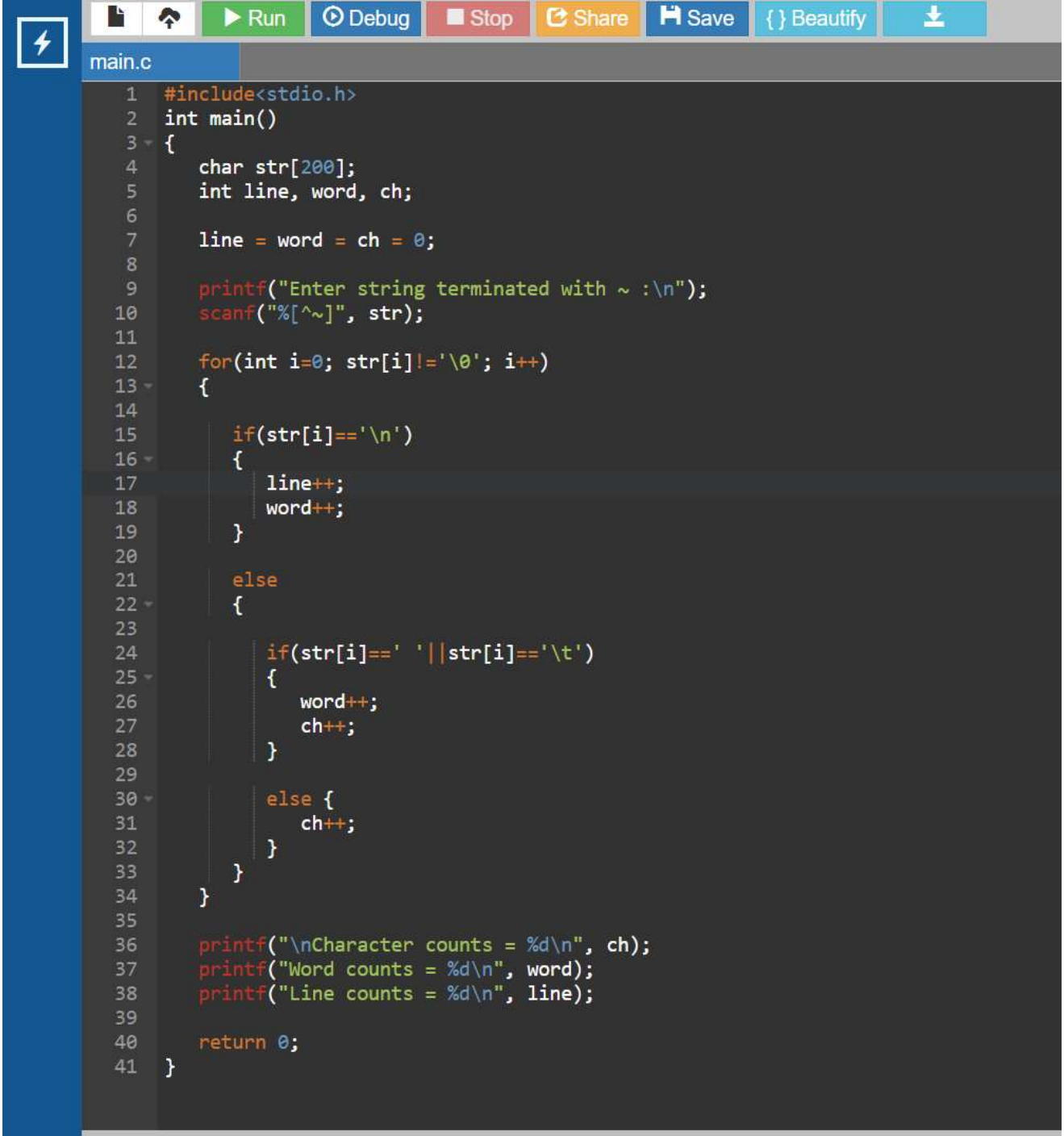
28     if (ch == ' ' || ch == '\t' || ch == '\n' || ch == '\0')
29         words++;
30 }
31
32 if (characters > 0)
33 {
34     words++;
35     lines++;
36 }
37
38 printf("\n");
39 printf("\n");
40 printf("Total characters = %d\n", characters);
41 printf("Total words = %d\n", words);
42 printf("Total lines = %d\n", lines);
43
44 fclose(file);
45
46 return 0;
47 }
```

### Output:-

```
The content of the file C:\Users\vampirepapi\Desktop\nowhere\Codes\Cpp\test.  
Shubham Sourabh  
Himanshu Kislay  
Anish Raj  
Alexndra - Alex  
Emilia Clarke  
  
Total characters = 71  
Total words      = 11  
Total lines      = 5  
[Finished in 1.0s]
```

Q 2. Write a program to count characters, word, line of the text file without file handling.

### Code:-



```
1  #include<stdio.h>
2  int main()
3  {
4      char str[200];
5      int line, word, ch;
6
7      line = word = ch = 0;
8
9      printf("Enter string terminated with ~ :\n");
10     scanf("%[^~]", str);
11
12     for(int i=0; str[i]!='\0'; i++)
13     {
14
15         if(str[i]=='\n')
16         {
17             line++;
18             word++;
19         }
20
21         else
22         {
23
24             if(str[i]==' ' || str[i]=='\t')
25             {
26                 word++;
27                 ch++;
28             }
29
30             else {
31                 ch++;
32             }
33         }
34     }
35
36     printf("\nCharacter counts = %d\n", ch);
37     printf("Word counts = %d\n", word);
38     printf("Line counts = %d\n", line);
39
40     return 0;
41 }
```

### Output:-

```
Enter string terminated with ~ :  
Shubham Sourabh  
Himanshu Kislay  
Anish Raj  
Alexndra - Alex  
Emilia Clarke  
~  
  
Character counts = 67  
Word counts = 11  
Line counts = 5  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```

Q3. Write a program to count no of repeated words of a text file using file handling, which will have ended with alphabets s or t.

Code:-

```
File Edit Selection Find View Goto Tools Project Preferences Help
1.c
1  #include <stdio.h>
2  #include <string.h>
3  char str[100];
4  void main()
5  {
6      FILE * file;
7      char* path = "C:\\Users\\vampirepapi\\Desktop\\nowhere\\Codes\\Cpp\\test.txt";
8      char ch;
9
10     int i, t, j, len;
11     printf("Enter a string : ");
12     scanf("%[^\n]s", str);
13
14     file = fopen(path, "r");
15     if (file == NULL)
16     {
17         printf("\nUnable to open file.\n");
18         printf("Please check if file exists and you have read privilege.\n");
19
20         exit(EXIT_FAILURE);
21     }
22
23     len = strlen(str);
24     str[len] = ' ';
25
26     for (t = 0, i = 0; i < strlen(str); i++)
27     {
28         if ((str[i] == ' ') && (str[i - 1] == 's'))
29         {
30             for (j = t; j < i; j++)
31                 printf("%c", str[j]);
32             t = i + 1;
33             printf("\n");
34         }
35     }
36 }
```

ECC: [ READY ], Line 13, Column 5

```
< > 1.c
25     str[len] = ' ';
26
27     for (t = 0, i = 0; i < strlen(str); i++)
28     {
29         if ((str[i] == ' ') && (str[i - 1] == 's'))
30         {
31             for (j = t; j < i; j++)
32                 printf("%c", str[j]);
33             t = i + 1;
34             printf("\n");
35         }
36         else
37         {
38             if (str[i] == ' ')
39             {
40                 t = i + 1;
41             }
42         }
43     }
44
45 }
```

### Output:-

```
Repeated words ended with alphabets s or t
```

```
words ended with s : 9
```

```
words ended with t : 4
```

```
[Finished in 0.9s]
```