

WelcomeC #include <stdio.h> Untitled-1

```
1 #include <stdio.h>
2 #include <ctype.h>
3
4 int main() {
5     FILE *fp;
6     char str[200];
7     int i;
8
9     printf("Enter a string: ");
10    fgets(str, sizeof(str), stdin);
11
12    // Convert to sentence case
13    str[0] = toupper(str[0]);
14    for (i = 1; str[i] != '\0'; i++) {
15        str[i] = tolower(str[i]);
16    }
17
18    fp = fopen("sentence.txt", "w");
19    fprintf(fp, "%s", str);
20    fclose(fp);
21
22    printf("Sentence case saved to sentence.txt\n");
23    return 0;
24 }
```

PROBLEMSOUTPUTDEBUG CONSOLETERMINALPORTS

Code + - [] ... | {} x

cd "/var/folders/w2/392b64ys4215vz\_llism4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_llism4rs40000gn/T/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/var/folders/w2/392b64ys4215vz\_llism4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_llism4rs40000gn/T/"tempCodeRunnerFile
Enter a string: hELLO hOw ARE YOU
Sentence case saved to sentence.txt
rajatsingh@Rajats-MacBook-Air T %

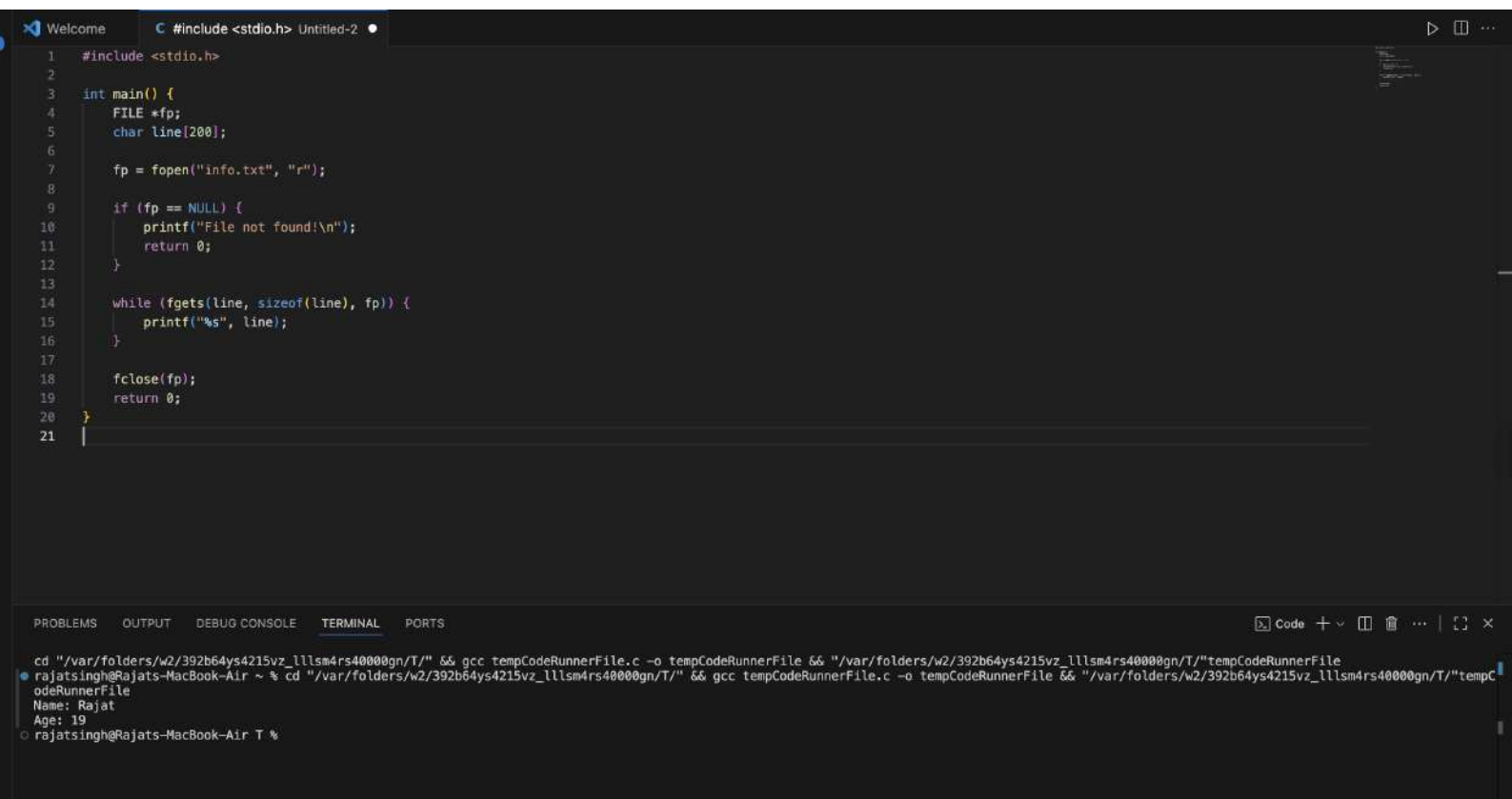
WelcomeC #include <stdio.h> Untitled-1

```
1 #include <stdio.h>
2
3 int main() {
4     FILE *fp;
5     char name[50];
6     int age;
7
8     fp = fopen("info.txt", "w");
9
10    printf("Enter name: ");
11    fgets(name, sizeof(name), stdin);
12
13    printf("Enter age: ");
14    scanf("%d", &age);
15
16    fprintf(fp, "Name: %sAge: %d\n", name, age);
17
18    fclose(fp);
19
20    printf("Data successfully saved to info.txt\n");
21    return 0;
22 }
23
```

PROBLEMSOUTPUTDEBUG CONSOLETERMINALPORTS

Code + - [ ] [x] [ ] [x] [x]

cd "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/"tempCodeRunnerFile
Enter name: Rajat
Enter age: 19
Data successfully saved to info.txt
rajatsingh@Rajats-MacBook-Air T %



Welcome

C #include <stdio.h> Untitled-1

```
4 int main() {
5     char ch;
6     int characters=0, words=0, lines=0, inWord=0;
7
8     fp=fopen("info.txt","r");
9     if(fp==NULL){
10         printf("File not found");
11         return 0;
12     }
13
14     while((ch=fgetc(fp))!=EOF){
15         characters++;
16         if(ch=='\n'){
17             lines++;
18             if(!isspace(ch) && inWord==0){
19                 inWord=1;
20                 words++;
21             } else if(isspace(ch)){
22                 inWord=0;
23             }
24         }
25     }
26
27     fclose(fp);
28     printf("Characters: %d\n",characters);
29     printf("Words: %d\n",words);
30     printf("Lines: %d",lines+1);
31     return 0;
32 }
33
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

Code

+

-

🔍

...

🔗

×

cd "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/"tempCodeRunnerFile

● rajatsingh@Rajats-MacBook-Air ~ % cd "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/"tempC

odeRunnerFile

Characters: 20

Words: 4

Lines: 3

○ rajatsingh@Rajats-MacBook-Air T %

The screenshot displays a C++ IDE with a source code editor and a terminal window. The source code is a C program that copies a file from a source to a destination. The code is as follows:

```
1 #include <stdio.h>
2
3 int main() {
4     FILE *src,*dest;
5     char sname[50], dname[50];
6     char ch;
7
8     printf("Enter source filename: ");
9     scanf("%s",sname);
10    printf("Enter destination filename: ");
11    scanf("%s",dname);
12
13    src=fopen(sname,"r");
14    if(src==NULL){
15        printf("Source file not found");
16        return 0;
17    }
18
19    dest=fopen(dname,"w");
20
21    while((ch=fgetc(src))!=EOF)
22        fputc(ch,dest);
23
24    fclose(src);
25    fclose(dest);
26    printf("File copied successfully");
27    return 0;
28 }
29
```

The terminal window shows the execution of the program. The user enters 'info.txt' as the source filename and 'file.txt' as the destination filename. The program outputs 'File copied successfully'.

```
cd "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/"tempCodeRunnerFile
Enter source filename: info.txt
Enter destination filename: file.txt
File copied successfully
rajatsingh@Rajats-MacBook-Air T %
```



WelcomeC #include <stdio.h> Untitled-1

```
1 #include <stdio.h>
2
3 int main() {
4     FILE *fp;
5     char fname[50], line[200];
6
7     printf("Enter filename: ");
8     scanf("%s", fname);
9
10    fp=fopen(fname, "r");
11    if(fp==NULL){
12        printf("File does not exist");
13        return 0;
14    }
15
16    while(fgets(line, 200, fp))
17        printf("%s", line);
18
19    fclose(fp);
20    return 0;
21 }
22
```

PROBLEMSOUTPUTDEBUG CONSOLETERMINALPORTS

Code + - [] ... | {} x

cd "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/"tempCodeRunnerFile
Enter filename: data.txt
ajat
rajatsingh@Rajats-MacBook-Air T %





WelcomeC #include <stdio.h> Untitled-1

```
1 #include <stdio.h>
2 #include <ctype.h>
3
4 int main() {
5     FILE *fp;
6     char ch;
7     int v=0,c=0;
8
9     fp=fopen("info.txt","r");
10    if(fp==NULL){
11        printf("File not found");
12        return 0;
13    }
14
15    while((ch=fgetc(fp))!=EOF){
16        ch=tolower(ch);
17        if(ch>='a' && ch<='z'){
18            if(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u')
19                v++;
20            else
21                c++;
22        }
23    }
24
25    fclose(fp);
26    printf("Vowels: %d\nConsonants: %d",v,c);
27    return 0;
28 }
29
```

PROBLEMSOUTPUTDEBUG CONSOLETERMINALPORTS

Code + -

Code Runner

cd "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/"tempCodeRunnerFile
● rajatsingh@Rajats-MacBook-Air ~ % cd "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz\_lllsm4rs40000gn/T/"tempCodeRunnerFile
Vowels: 6
Consonants: 6
○ rajatsingh@Rajats-MacBook-Air T %

Welcome C #include <stdio.h> Untitled-1

```

1 #include <stdio.h>
2
3 int main() {
4     FILE *f;
5     int num, sum = 0, count = 0;
6     float avg;
7
8     f = fopen("numbers.txt", "w");
9     printf(f, "10 20 30 40 50");
10    fclose(f);
11
12    f = fopen("numbers.txt", "r");
13    while (fscanf(f, "%d", &num) == 1) {
14        sum += num;
15        count++;
16    }
17    fclose(f);
18
19    avg = (float)sum / count;
20
21    printf("Sum = %d\n", sum);
22    printf("Average = %.2f\n", avg);
23
24    return 0;
25 }
26 #include <stdio.h>

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
cd "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/"tempCodeRunnerFile
● rajatsingh@Rajats-MacBook-Air ~ % cd "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/"tempCodeRunnerFile
Sum = 150
Average = 30.00
● rajatsingh@Rajats-MacBook-Air T %
```

Welcome C #include <stdio.h> Untitled-1

```
1 #include <stdio.h>
2
3 int main() {
4     FILE *f;
5     char name[50];
6     int roll, i;
7     float marks;
8
9     f = fopen("students.txt", "w");
10    fprintf(f, "Rajat 101 85.5\n");
11    fprintf(f, "Nikhil 102 92.0\n");
12    fprintf(f, "Abhay 103 78.25\n");
13    fclose(f);
14
15    f = fopen("students.txt", "r");
16    printf("Student Records:\n");
17
18    while (fscanf(f, "%s %d %f", name, &roll, &marks) == 3) {
19        printf("%s %d %.2f\n", name, roll, marks);
20    }
21
22    fclose(f);
23    return 0;
24 }
25
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code + - - - | { } x

```
cd "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/"tempCodeRunnerFile
● rajatsingh@Rajats-MacBook-Air ~ % cd "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/var/folders/w2/392b64ys4215vz_lllsm4rs40000gn/T/"tempC
odeRunnerFile
Student Records:
Rajat 101 85.50
Nikhil 102 92.00
Abhay 103 78.25
○ rajatsingh@Rajats-MacBook-Air T %
```