

S M SHAHZEB NAQVI

MCS PREVIOUS

LAB 6

P20101036

Class assignment

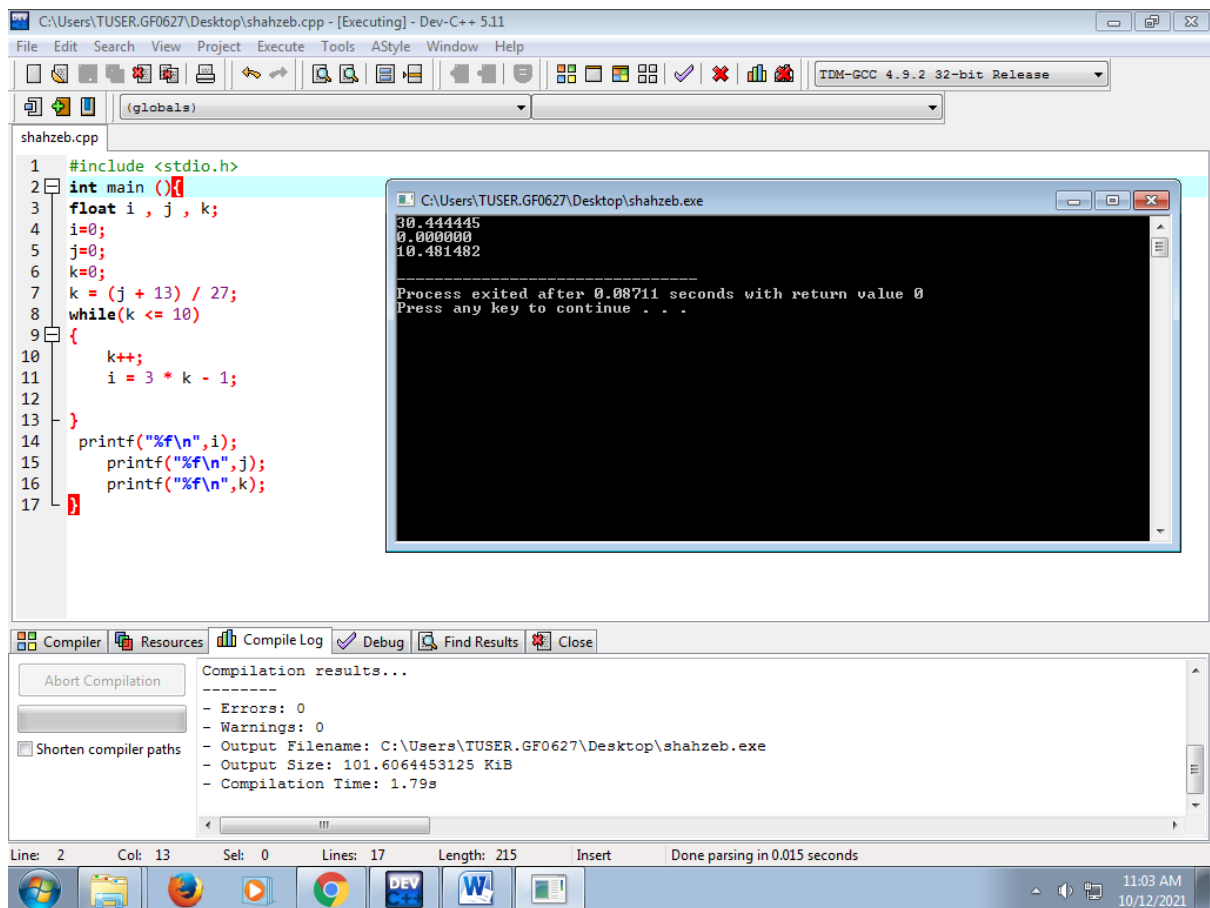
Submitted to

Miss Farzeen

Q1

```
#include <stdio.h>
int main (){
float i , j , k;
i=0;
j=0;
k=0;
k = (j + 13) / 27;
while(k <= 10)
{
    k++;
    i = 3 * k - 1;

}
printf("%f\n",i);
    printf("%f\n",j);
        printf("%f\n",k);
}
```



Q2

```
#include <stdio.h>
```

```
int main (){
```

```
    int i;
```

```
    for (i = 2; i <= 30; i+=2)
```

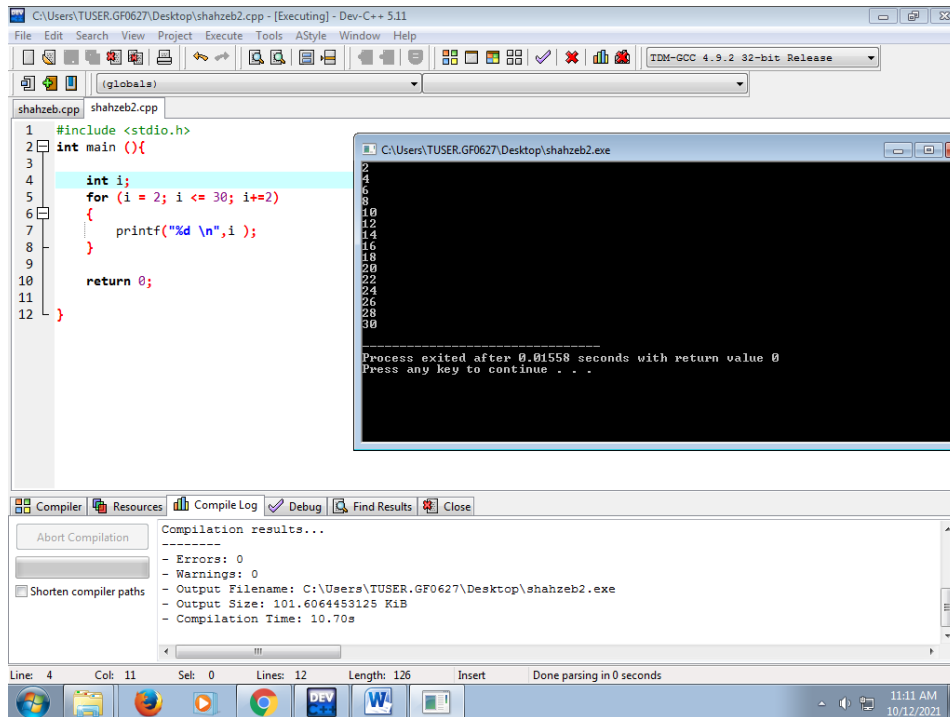
```
    {
```

```
        printf("%d \n",i );
```

```
    }
```

```
    return 0;
```

```
}
```



Q3

```
#include<stdio.h>

int main(){
int phy_marks,chem_marks,math_marks,urdu_marks,eng_marks,islam_marks,total_marks;
float percentage,obtained_marks;
printf("Enter Physics marks : ");
scanf("%d",&phy_marks);
printf("Enter Chem marks : ");
scanf("%d",&chem_marks);
printf("Enter Math marks : ");
scanf("%d",&math_marks);
printf("Enter Urdu marks : ");
scanf("%d",&urdu_marks);
printf("Enter Eng marks : ");
scanf("%d",&eng_marks);
printf("Enter islam marks : ");
scanf("%d",&islam_marks);

obtained_marks= phy_marks + chem_marks + math_marks + urdu_marks + eng_marks +
islam_marks;
printf("-----\n");
printf("                Marksheet\n");
printf("_____ \n")
;
printf("Chemistry Marks = %d\n",chem_marks );
printf("Math Marks = %d\n",math_marks );
printf("Urdu Marks = %d\n",urdu_marks);
printf("English Marks = %d\n",eng_marks );
printf("Islamiat Marks = %d\n", islam_marks );
printf("Total Marks = %d\n",total_marks );
printf("Obtain Marks = %f \n",obtained_marks );
percentage=((obtained_marks / 1000) * 100);
printf("Percentage = %f \n",percentage);

if (percentage >=80 and percentage <=100){

    printf("Grade A");}
else if (percentage >=65 and percentage <=80){
```

```
printf("Grade B");}
```

```
else if (percentage >=50 and percentage <=70){
```

```
    printf("Grade C");}
```

```
else if (percentage >=40 and percentage <=60){
```

```
    printf("Grade D");}
```

```
else if ( percentage >=0 and percentage <=50){
```

```
}
```

```
}
```

C:\Users\TUSER.GF0627\Desktop\shahzeb3.cpp - [Executing] - Dev-C++ 5.11

File Edit Search View Project Execute Tools AStyle Window Help

(globals)

[*] s

[*] shahzeb2.cpp shahzeb3.cpp

1 19 printf("-----\n");

2 20 printf("Marksheet\n");

3 21 printf("-----\n");

4 22 printf("Chemistry Marks = %d\n",chem_marks);

5 23 printf("Math Marks = %d\n",math_marks);

6 24 printf("Urdu Marks = %d\n",urdu_marks);

7 25 printf("English Marks = %d\n",eng_marks);

8 26 printf("Islamiat Marks = %d\n",islam_marks);

9 27 printf("Total Marks = %d\n",total_marks);

10 28 printf("Obtain Marks = %f \n",obtained_marks);

11 29 int __cdecl printf (const char * __restrict __Format, ...)

12 30 printf("Percentage = %f \n",percentage);

13 31

14 32 if (percentage >=80 and percentage <=100){

15 33

16 34 printf("Grade A");

17 35 } else if (percentage >=65 and percentage <=80){

18 36

19 37 printf("Grade B");

20 38

21 39 } else if (percentage >=50 and percentage <=70){

22 40

Compiler Resources Compile Log Debug Find Results (14) Close

Abort Compilation

Compilation results...

- Errors: 0

- Warnings: 0

- Output Filename: C:\Users\TUSER.GF0627\Desktop\shahzeb3.exe

- Output Size: 102.947265625 KiB

- Compilation Time: 1.06s

Line: 28 Col: 33 Sel: 0 Lines: 48 Length: 1596 Insert

C:\Users\TUSER.GF0627\Desktop\shahzeb3.exe

Enter Physics marks : 25
Enter Chem marks : 24
Enter Math marks : 35
Enter Urdu marks : 68
Enter Eng marks : 85
Enter islam marks : 56

Marksheet

Chemistry Marks = 24
Math Marks = 35
Urdu Marks = 68
English Marks = 85
Islamiat Marks = 56
Total Marks = 43
Obtain Marks = 293.000000
Percentage = 29.299999

Process exited after 7.756 seconds with return value 0
Press any key to continue . . .

11:43 AM
10/12/2021


```

cout << char(S) << char(S) << char(S) << char(S) << char(S) << char(S) << char(S);
for (int j = 1; j <= 6; j++) {
    if (k + j == 5 && k != 4 && j != 6) {
        SetConsoleTextAttribute(console, 15);
        cout << "*";
    } else if (k + j != 5 && k != 4 && j != 6) {
        SetConsoleTextAttribute(console, 2);
        cout << char(S);
    } else if (k == 4 && j == 5) {
        SetConsoleTextAttribute(console, 15);
        cout << "*";
        SetConsoleTextAttribute(console, 2);
        tab_space();
        SetConsoleTextAttribute(console, 15);
        cout << "*";
        SetConsoleTextAttribute(console, 2);
        tab_space();
        cout << char(S) << char(S) << char(S) << char(S) << char(S) << char(S);
        cout << char(PAK) << "\n";
    }
}
if (k != 4) {
    SetConsoleTextAttribute(console, 2);
    tab_space();
    tab_space();
    cout << char(S) << char(S) << char(S);
    cout << char(PAK) << "\n";
}
}

for (int i = 4; i >= 0; i--) {
    SetConsoleTextAttribute(console, 15);
    cout << char(PAK);
    SetConsoleTextAttribute(console, 15);
    tab_space();
    cout << char(PAK);
    SetConsoleTextAttribute(console, 2);
    tab_space();
    for (int j = 1; j < 6; j++) {

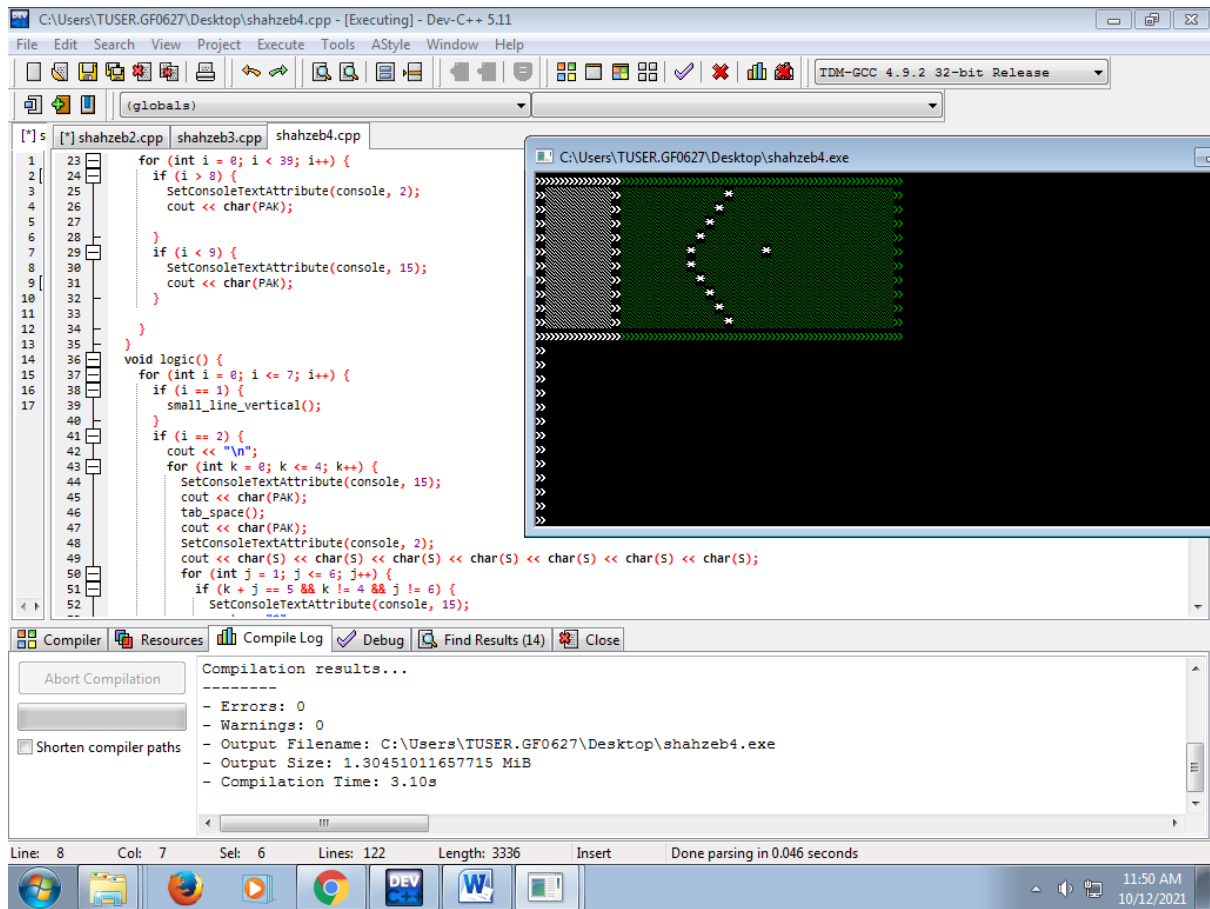
        if (i + j == 5) {

            SetConsoleTextAttribute(console, 15);
            cout << "*";
        } else {
            SetConsoleTextAttribute(console, 2);
            cout << char(S);
        }
    }
    SetConsoleTextAttribute(console, 2);
    tab_space();
    tab_space();
    cout << char(S) << char(S) << char(S);

    cout << char(PAK) << "\n";
}
}

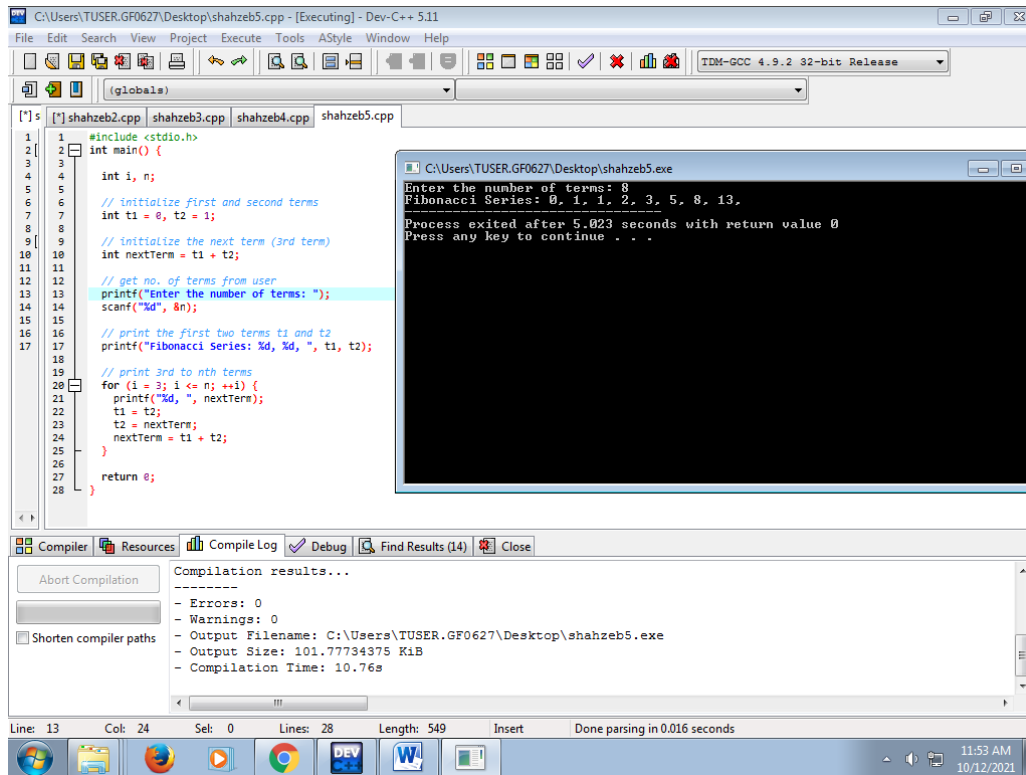
```

```
if (i == 6) {  
    small_line_vertical();  
    cout << "\n";  
}  
if (i == 7) {  
    SetConsoleTextAttribute(console, 15);  
    hor();  
    hor();  
}  
}  
}  
};  
main() {  
    Pakistan data;  
    data.logic();  
}
```



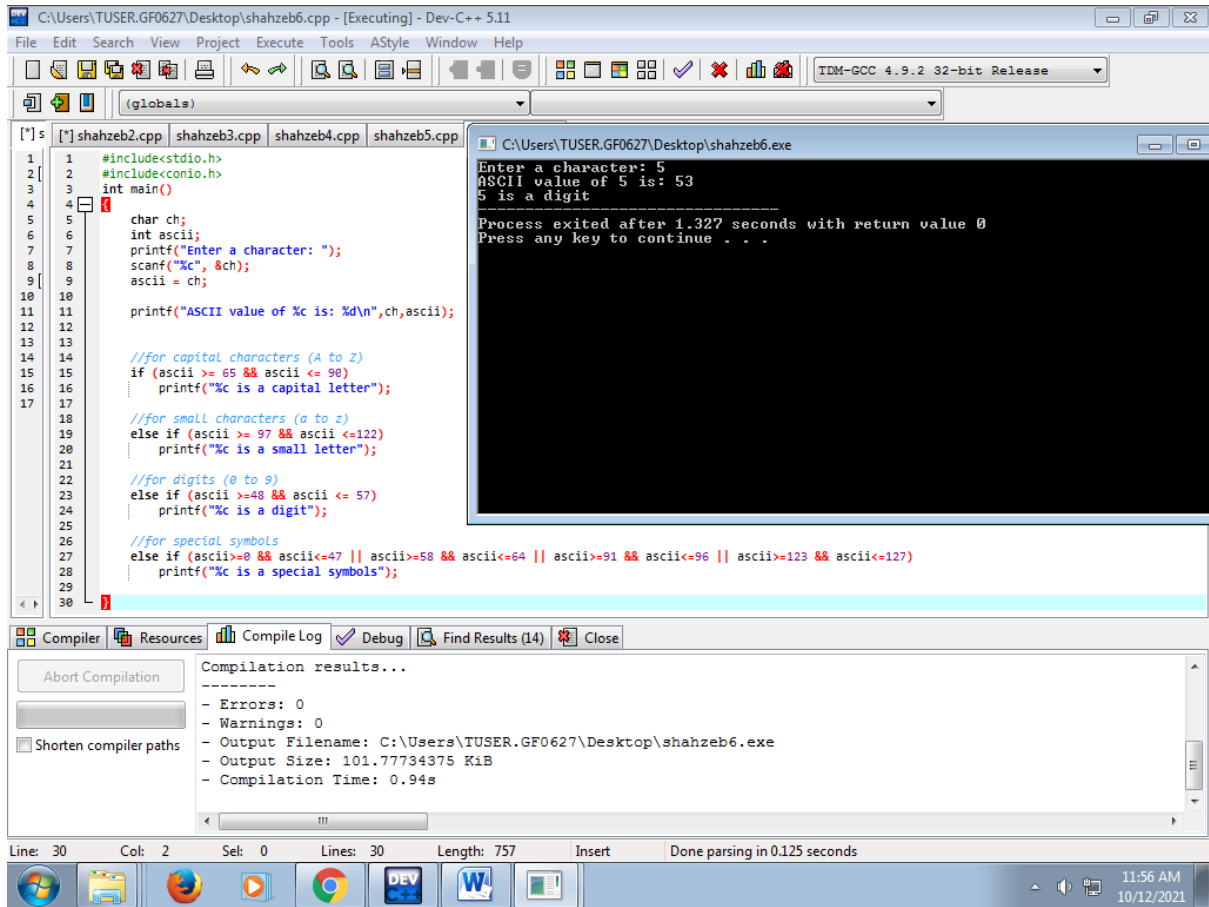
Q5

```
#include <stdio.h>
int main() {
    int i, n;
    // initialize first and second terms
    int t1 = 0, t2 = 1;
    // initialize the next term (3rd term)
    int nextTerm = t1 + t2;
    // get no. of terms from user
    printf("Enter the number of terms: ");
    scanf("%d", &n);
    // print the first two terms t1 and t2
    printf("Fibonacci Series: %d, %d, ", t1, t2);
    // print 3rd to nth terms
    for (i = 3; i <= n; ++i) {
        printf("%d, ", nextTerm);
        t1 = t2;
        t2 = nextTerm;
        nextTerm = t1 + t2;
    }
    return 0;
}
```



Q6

```
#include<stdio.h>
#include<conio.h>
int main()
{
    char ch;
    int ascii;
    printf("Enter a character: ");
    scanf("%c", &ch);
    ascii = ch;
    printf("ASCII value of %c is: %d\n",ch,ascii);
    //for capital characters (A to Z)
    if (ascii >= 65 && ascii <= 90)
        printf("%c is a capital letter");
    //for small characters (a to z)
    else if (ascii >= 97 && ascii <=122)
        printf("%c is a small letter");
    //for digits (0 to 9)
    else if (ascii >=48 && ascii <= 57)
        printf("%c is a digit");
    //for special symbols
    else if (ascii>=0 && ascii<=47 || ascii>=58 && ascii<=64 || ascii>=91 && ascii<=96 || ascii>=123 &&
ascii<=127)
        printf("%c is a special symbols");
}
```



Q7

```
#include <stdio.h>
#include <stdbool.h>

int main() {
    int counter;
    float gallons, miles, tankAverage, overallAverage, total;
    counter = 0;
    total = 0;

    while(true) {
        printf( "Enter the gallons used, (-1 to end): \n" );
        scanf( "%f", &gallons );

        if ( gallons == -1 ) {
            overallAverage = total / counter;
            printf( "The overall average miles/gallon was %f\n", overallAverage );

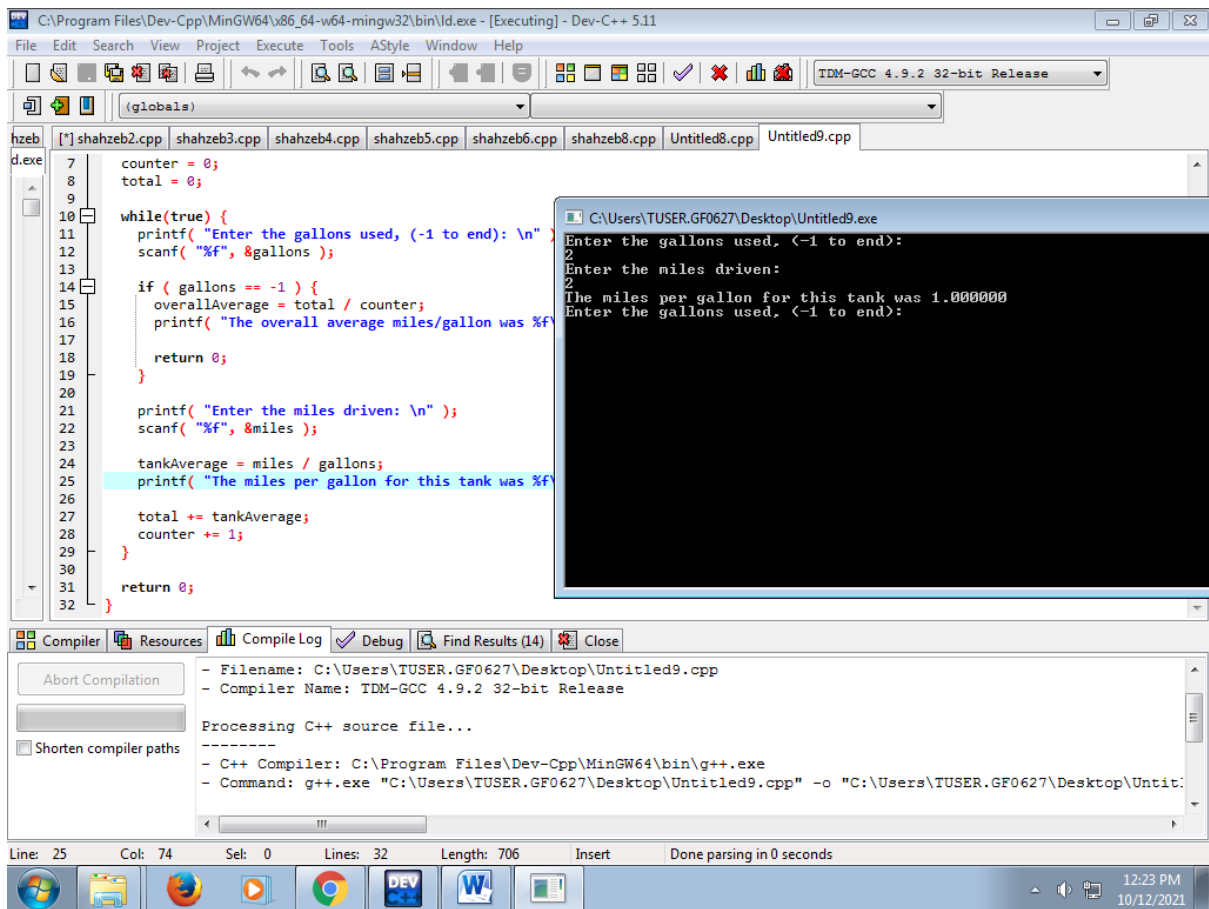
            return 0;
        }

        printf( "Enter the miles driven: \n" );
        scanf( "%f", &miles );

        tankAverage = miles / gallons;
        printf( "The miles per gallon for this tank was %f\n", tankAverage );

        total += tankAverage;
        counter += 1;
    }

    return 0;
}
```



Q8

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int acc;
    float bal,cha,cred,limit;
    while (acc!=-1){
        printf("Enter account number (-1 to end):");
        scanf("%d",&acc);
        if (acc== -1)
            break;
        printf("Enter beginning balance:");
        scanf("%f",&bal);
        printf("Enter total charges:");
        scanf("%f",&cha);
        printf("Enter total credits:");
        scanf("%f",&cred);
        printf("Enter credit limit:");
        scanf("%f",&limit);
        bal+=cha-cred;
        if (bal>limit){
            printf("account:\t%d\nCredit Limit:\t%.2f\nBalance:\t%.2f",acc,limit,bal);
            printf("\nCredit Limit Exceeded.\n\n");
        }
    }
    return 0;
}
```

