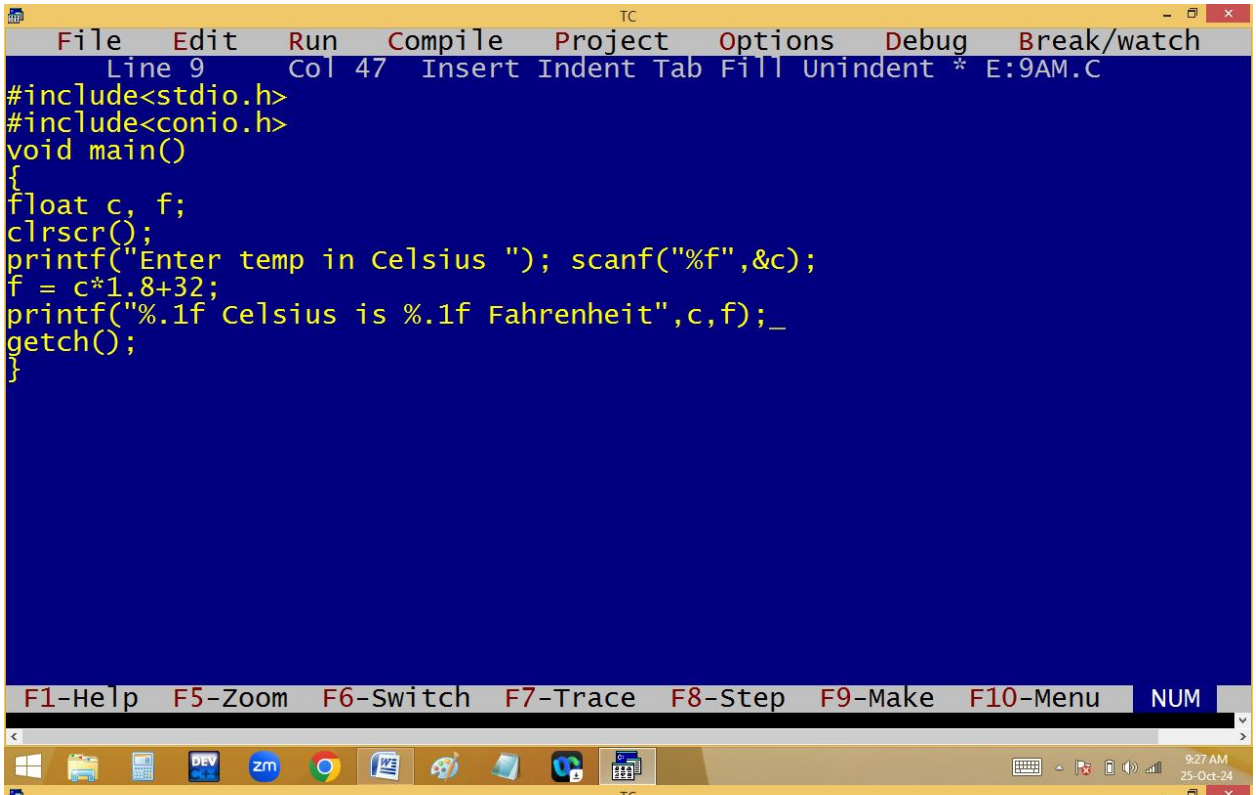
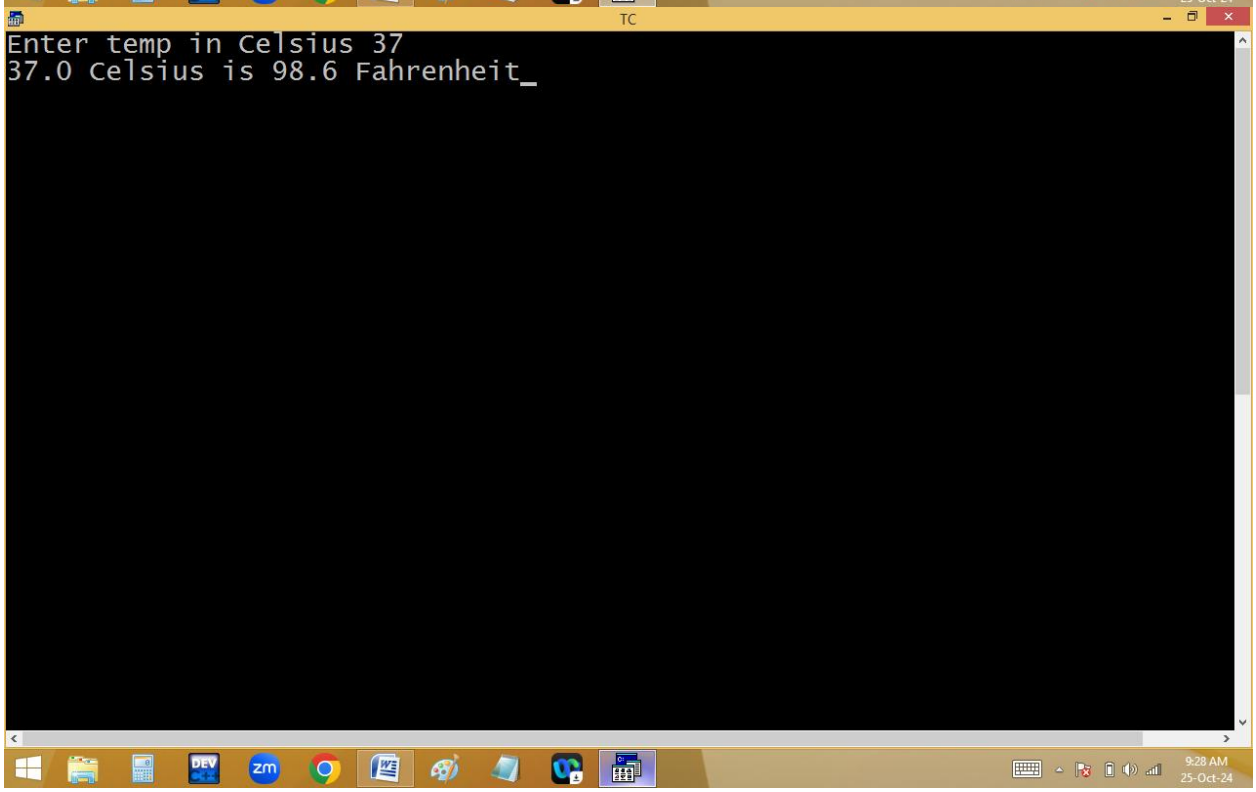
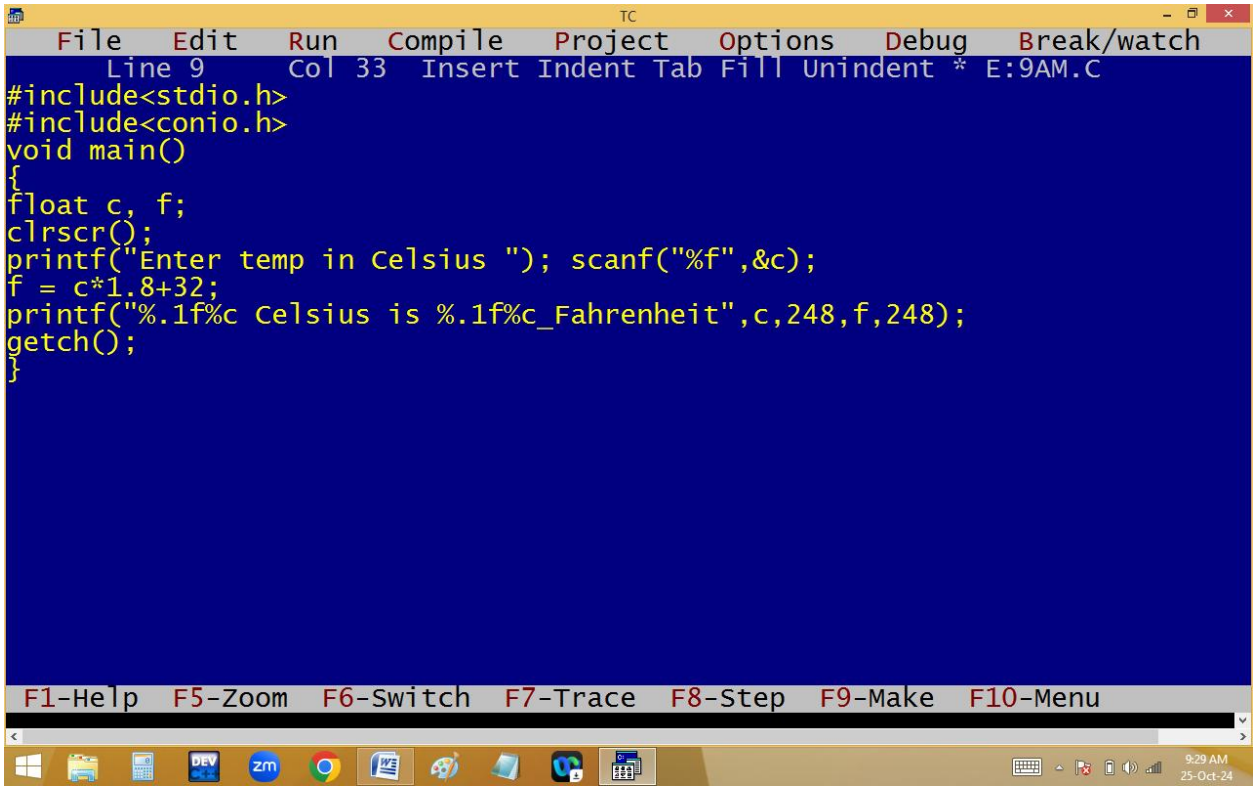
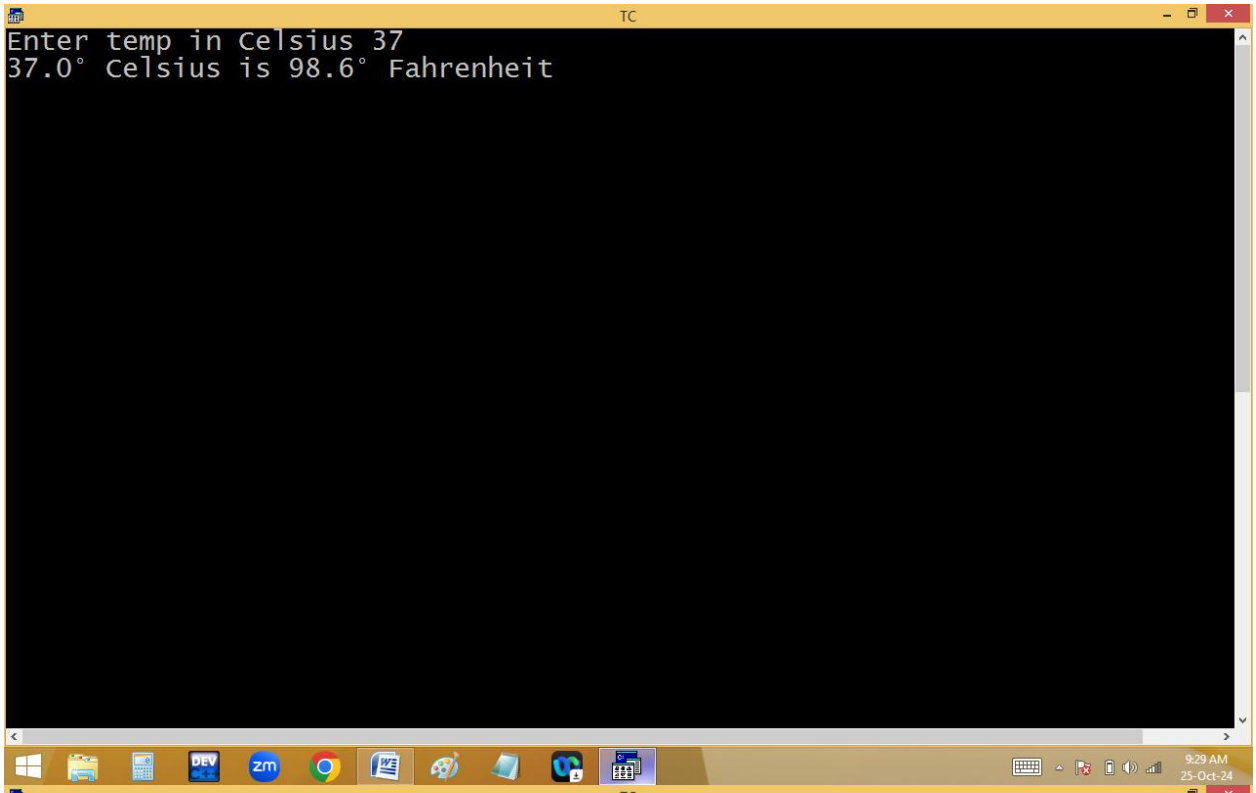
Celsius to Fahrenheit:

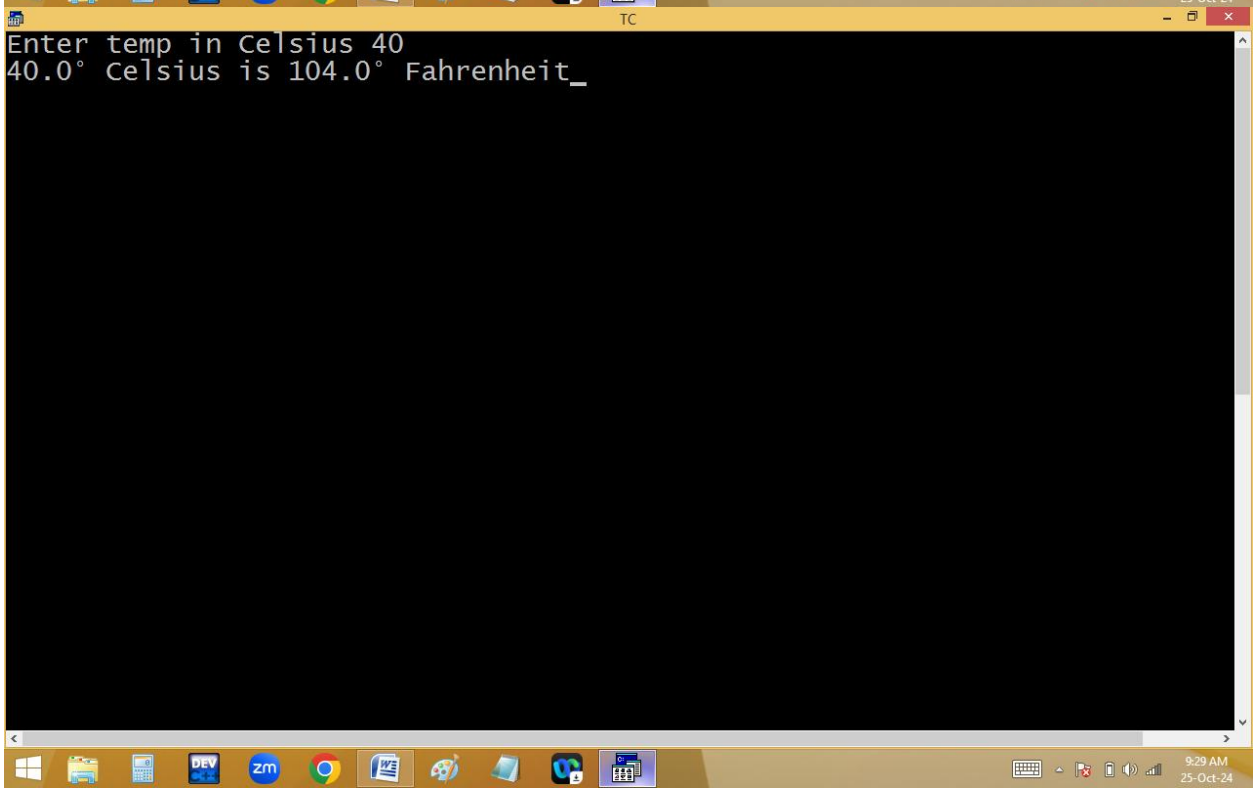
F = c * 1.8 + 32


TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 47 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
float c, f;
clrscr();
printf("Enter temp in Celsius "); scanf("%f",&c);
f = c*1.8+32;
printf("%.1f Celsius is %.1f Fahrenheit",c,f);_
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu NUM


TC
Enter temp in Celsius 37
37.0 Celsius is 98.6 Fahrenheit_

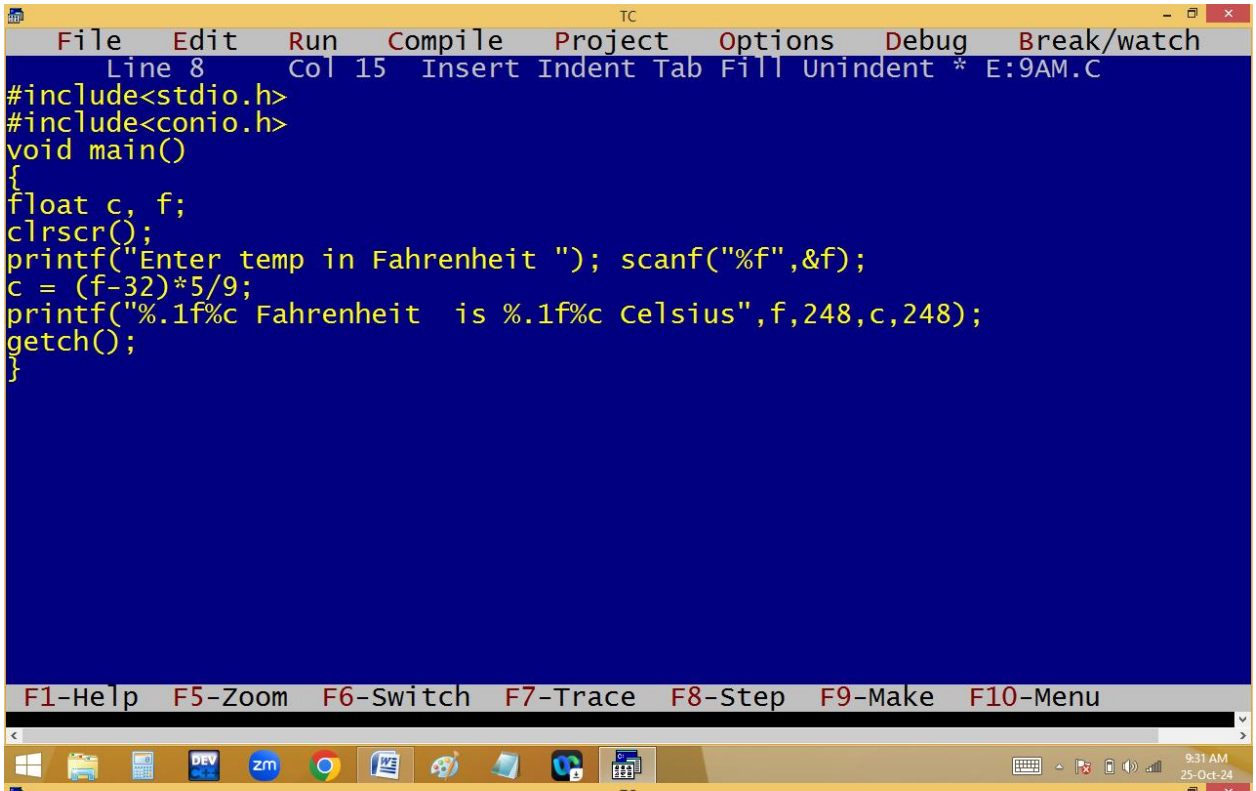

TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 33 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
float c, f;
clrscr();
printf("Enter temp in Celsius "); scanf("%f",&c);
f = c*1.8+32;
printf("%.1f%c Celsius is %.1f%c_Fahrenheit",c,248,f,248);
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu
9:29 AM
25-Oct-24

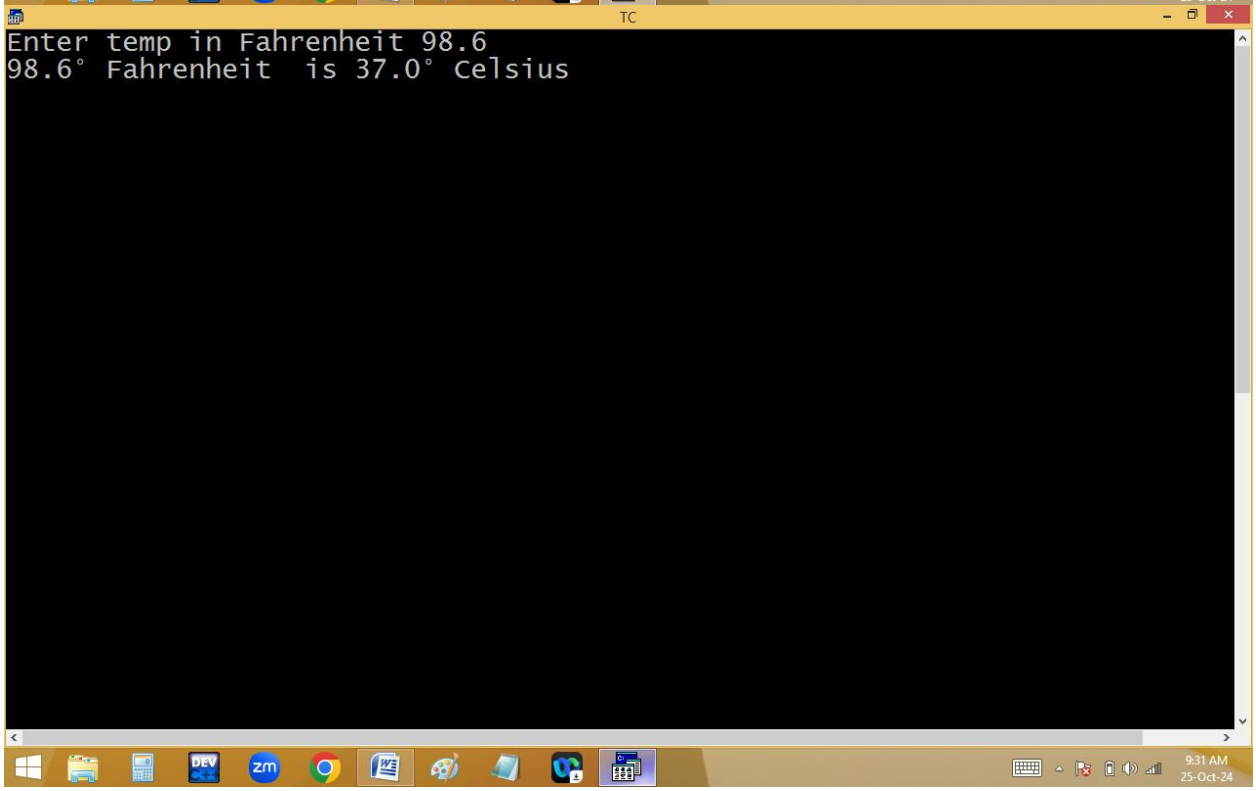




Fahrenheit to Celsius:

C = f-32*5/9


TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 15 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
float c, f;
clrscr();
printf("Enter temp in Fahrenheit "); scanf("%f",&f);
c = (f-32)*5/9;
printf("%.1f%c Fahrenheit is %.1f%c Celsius",f,248,c,248);
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu


TC
Enter temp in Fahrenheit 98.6
98.6° Fahrenheit is 37.0° Celsius

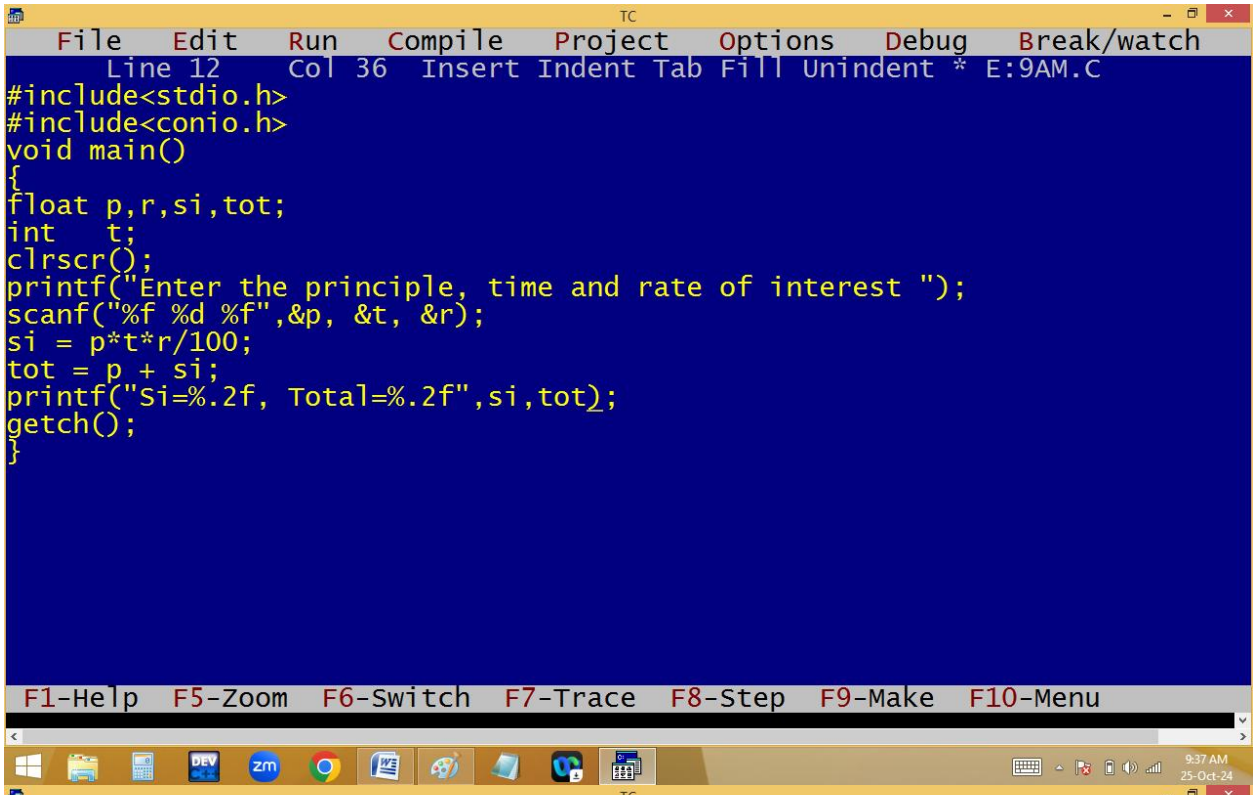
Finding simple interest:

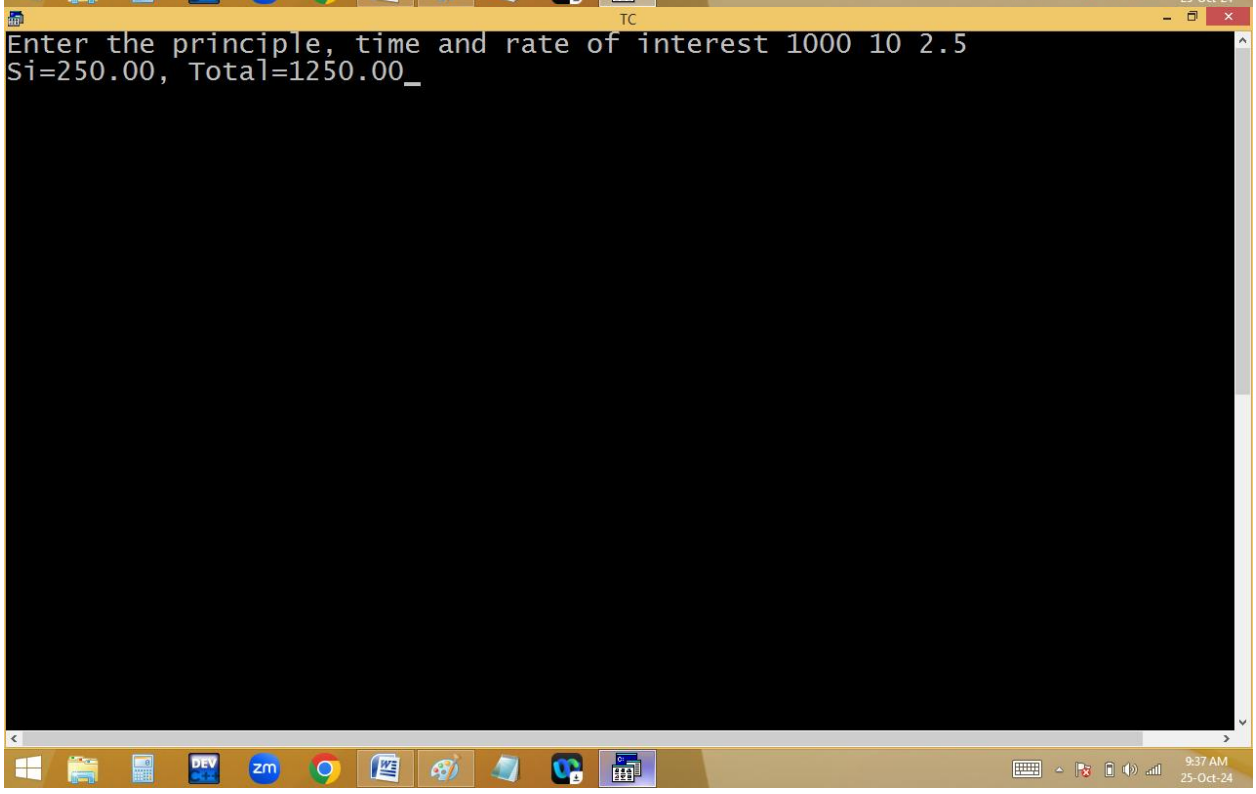
p*t*r/100

1000
250
Tot=1250

10

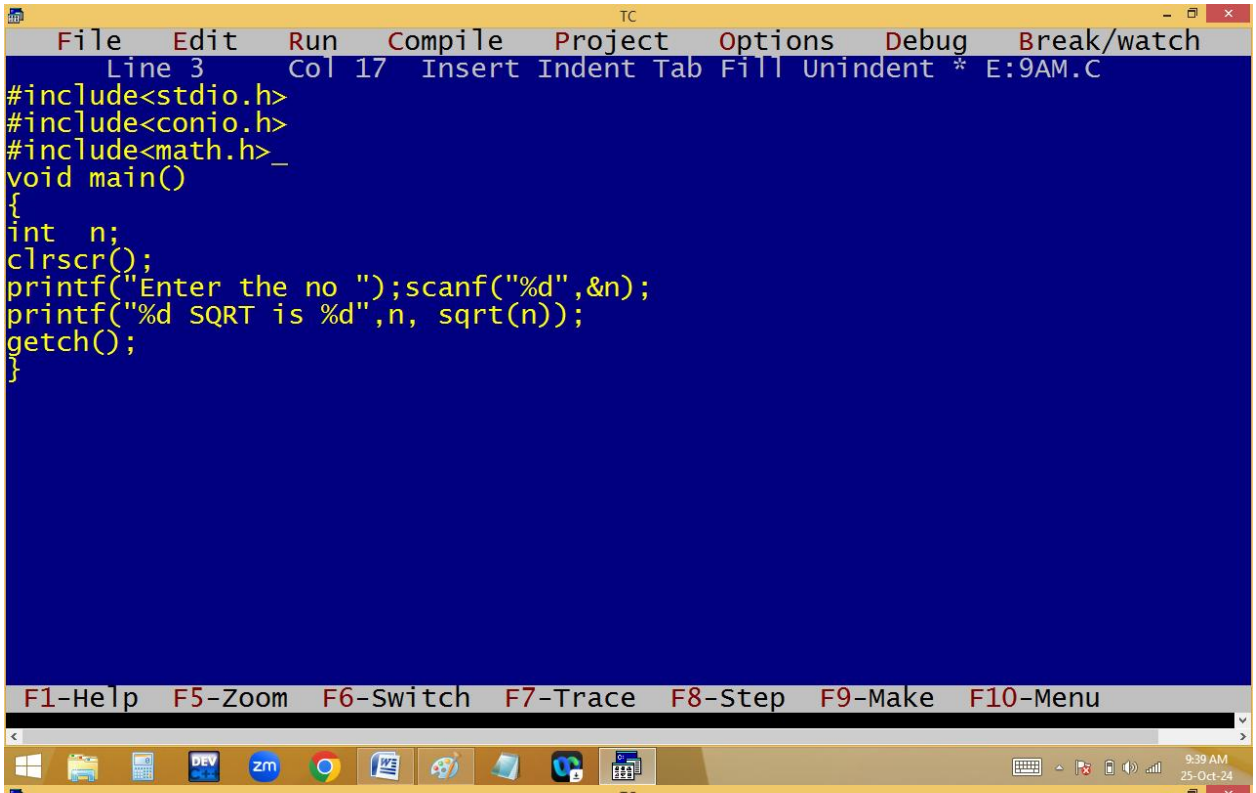
2.5 x 100 x 10
25 x 10 = 250

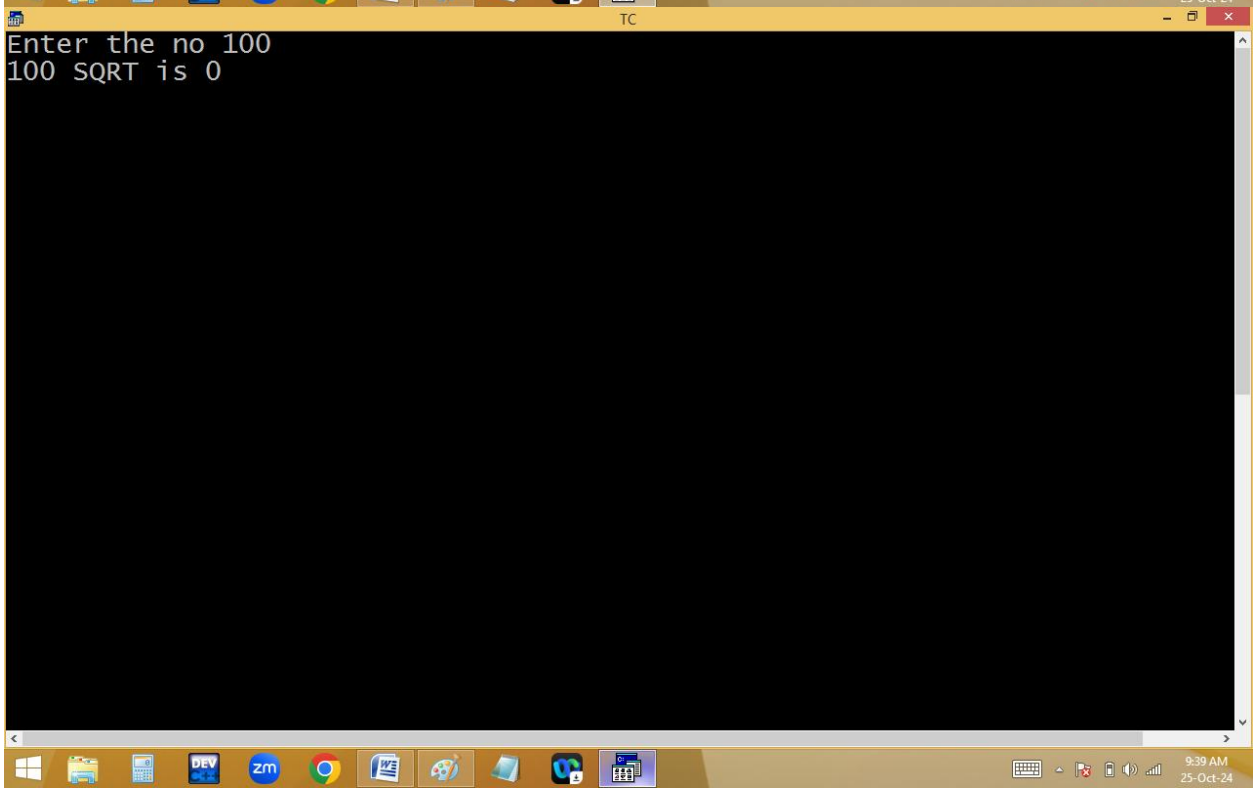

TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 36 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
float p,r,si,tot;
int t;
clrscr();
printf("Enter the principle, time and rate of interest ");
scanf("%f %d %f",&p, &t, &r);
si = p*t*r/100;
tot = p + si;
printf("Si=%.2f, Total=%.2f",si,tot);
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu

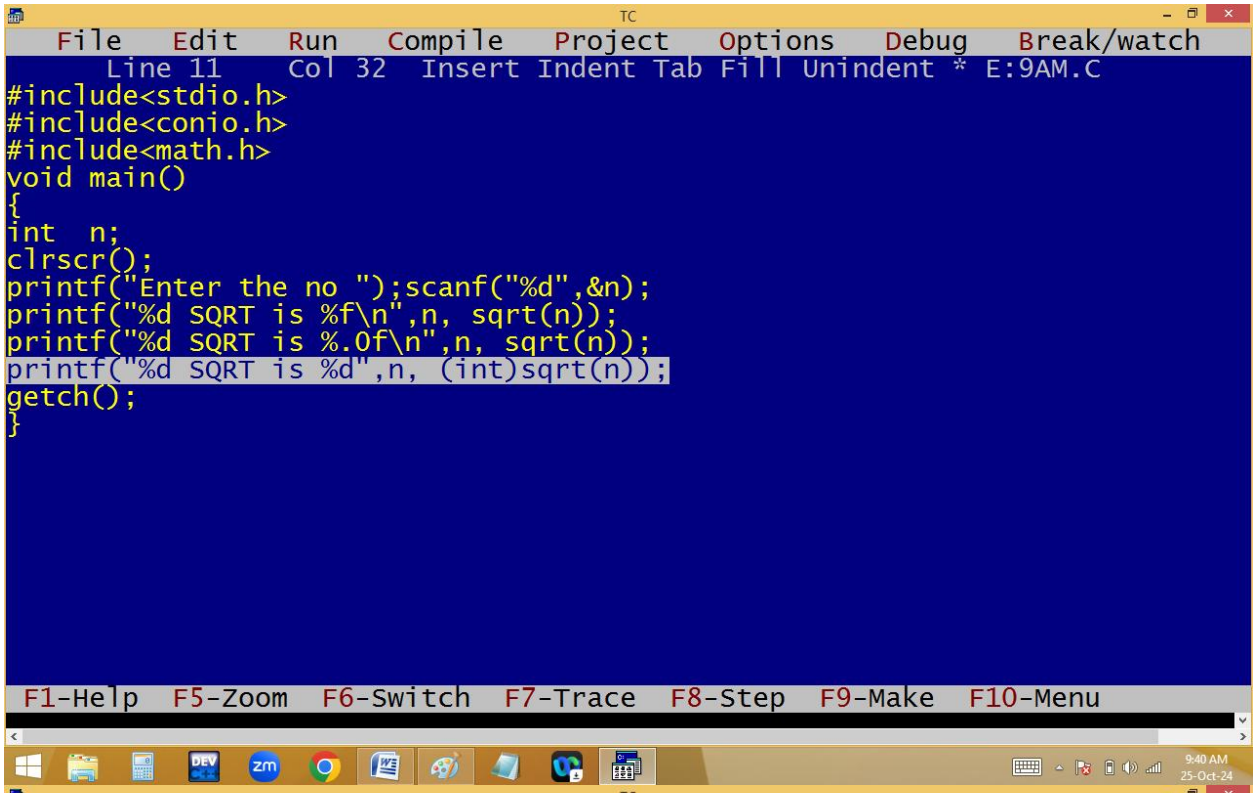

TC
Enter the principle, time and rate of interest 1000 10 2.5
Si=250.00, Total=1250.00

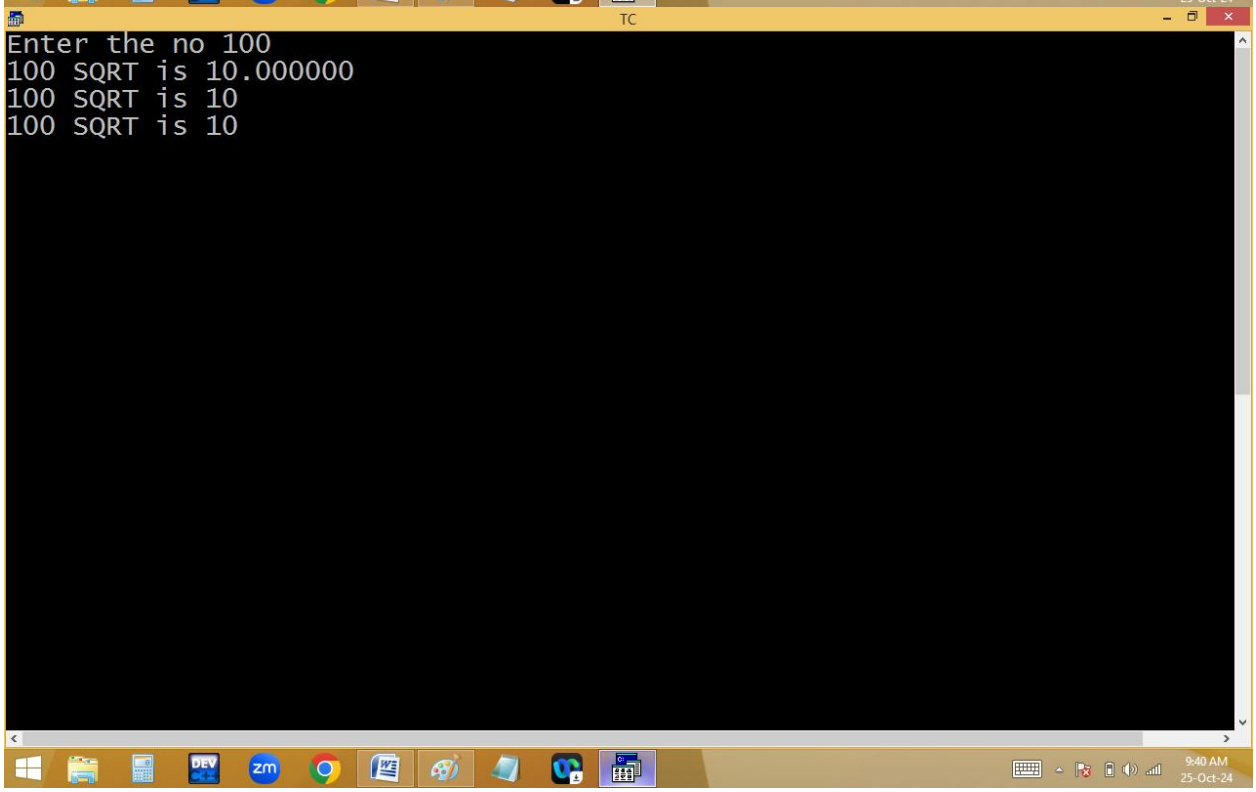
Finding sqrt of given no:

100 sqrt is 10


TC
File Edit Run Compile Project Options Debug Break/watch
Line 3 Col 17 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
#include<math.h>_
void main()
{
int n;
clrscr();
printf("Enter the no ");scanf("%d",&n);
printf("%d SQRT is %d",n, sqrt(n));
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu

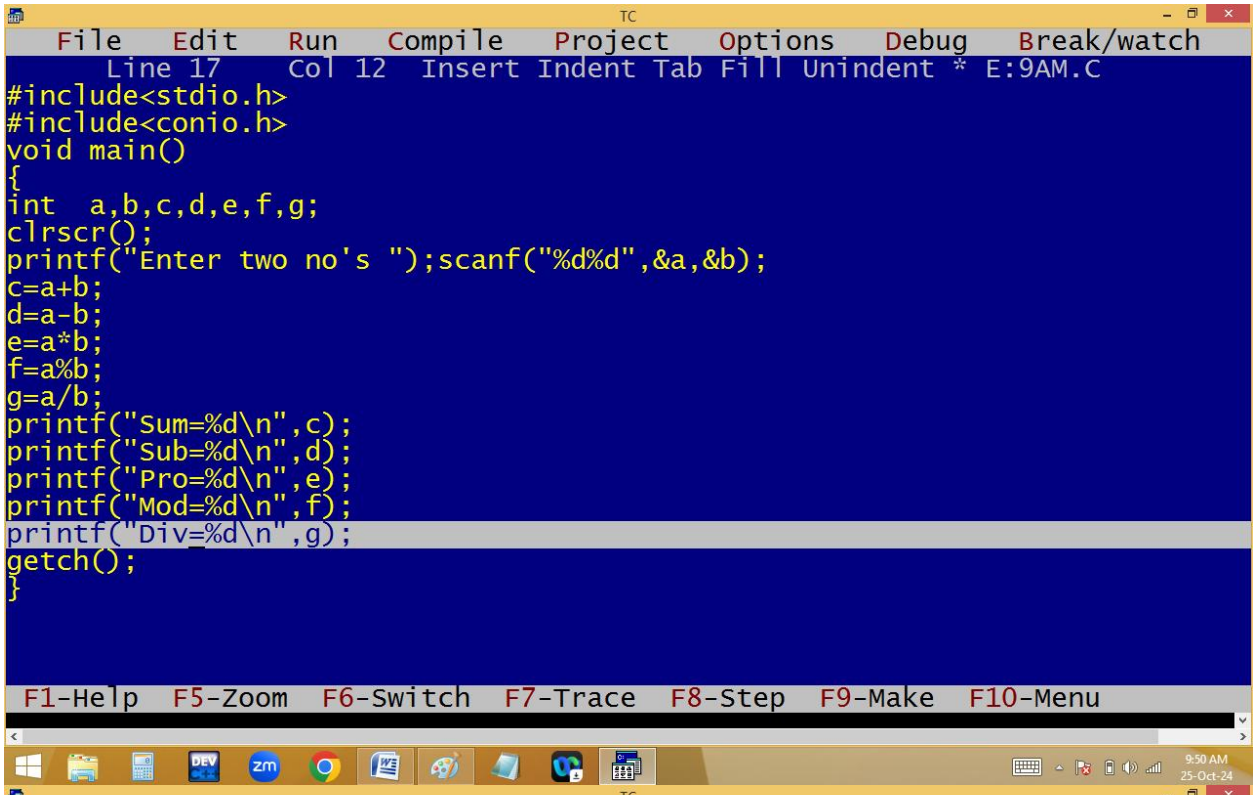

TC
Enter the no 100
100 SQRT is 0

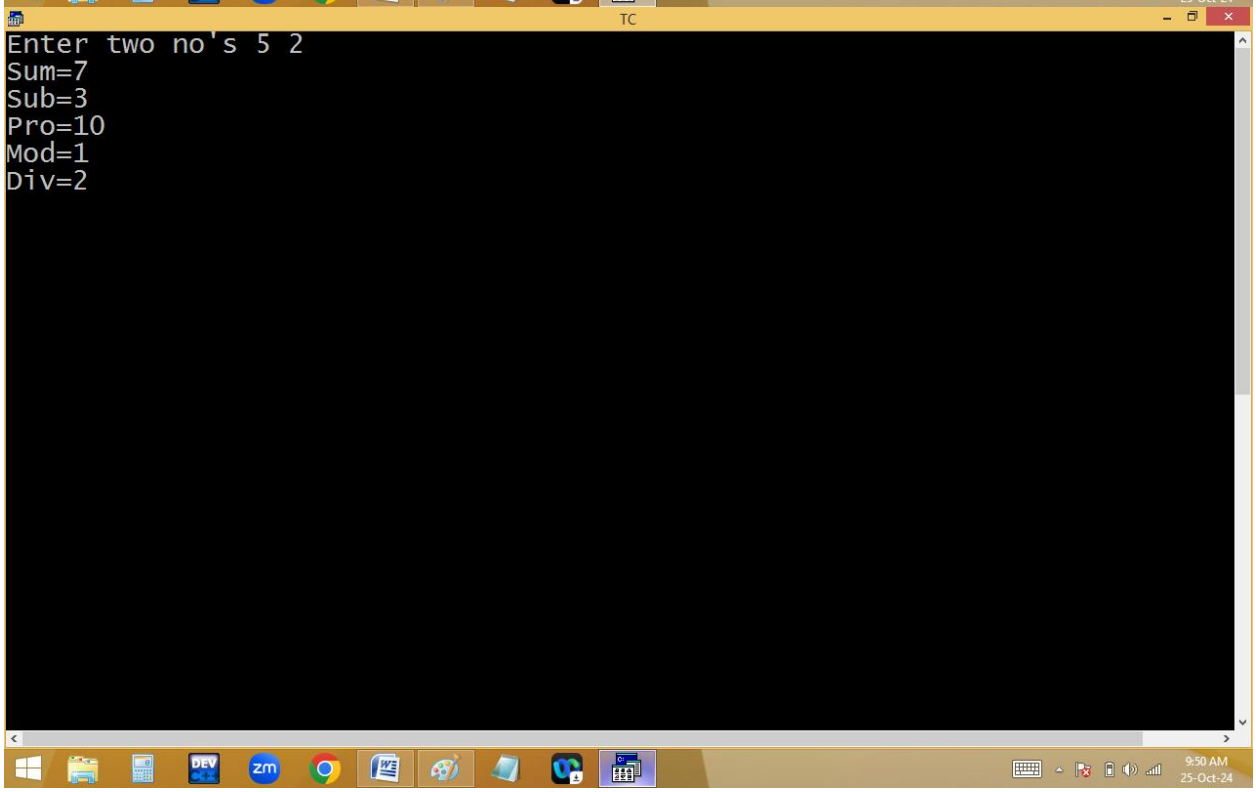

TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 32 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
int n;
clrscr();
printf("Enter the no ");scanf("%d",&n);
printf("%d SQRT is %f\n",n, sqrt(n));
printf("%d SQRT is %.0f\n",n, sqrt(n));
printf("%d SQRT is %d",n, (int)sqrt(n));
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu

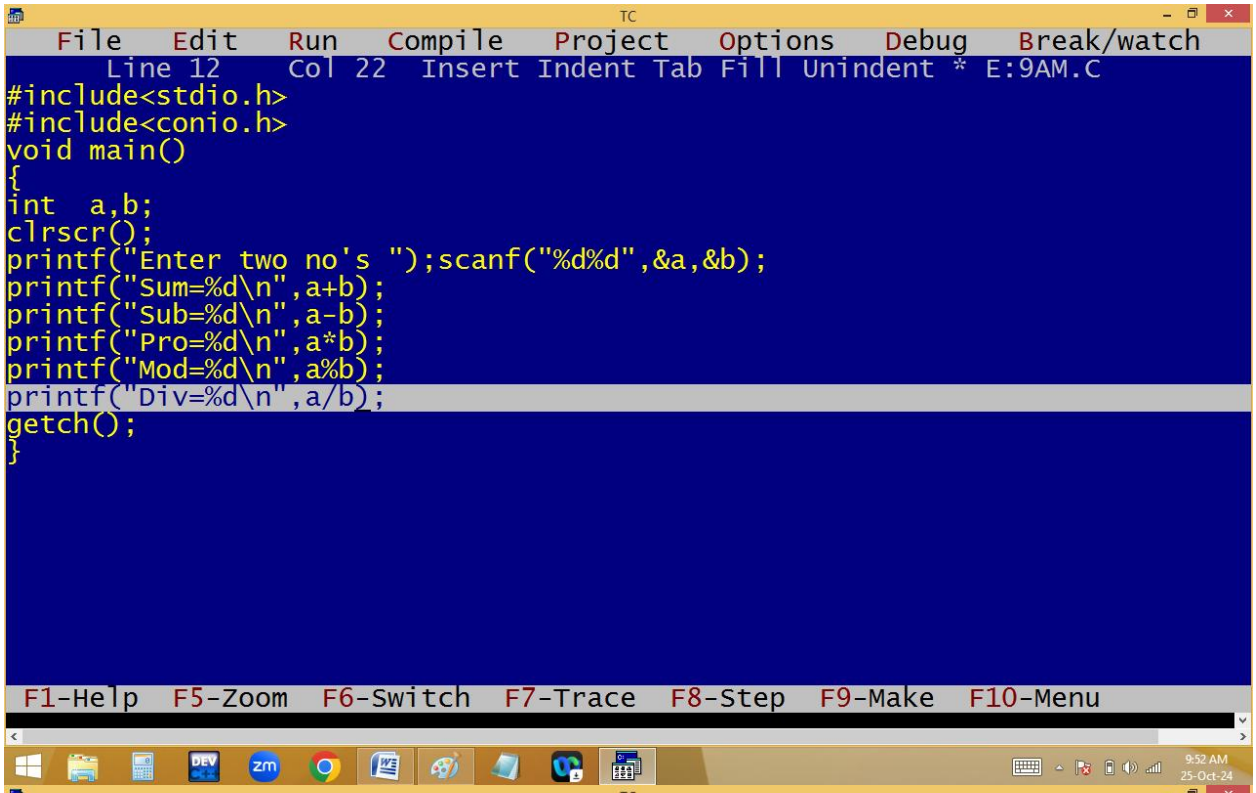

TC
Enter the no 100
100 SQRT is 10.000000
100 SQRT is 10
100 SQRT is 10

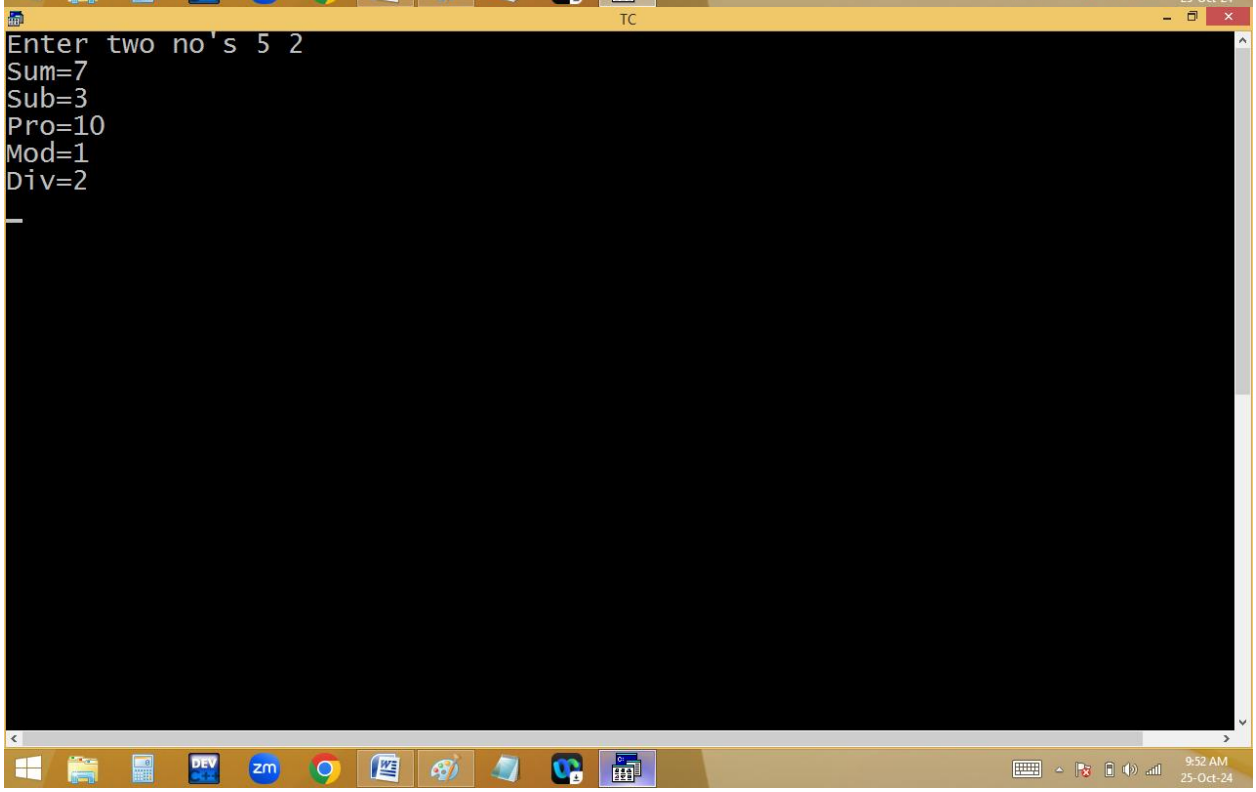
Read two numbers and perform all arithmetic operations

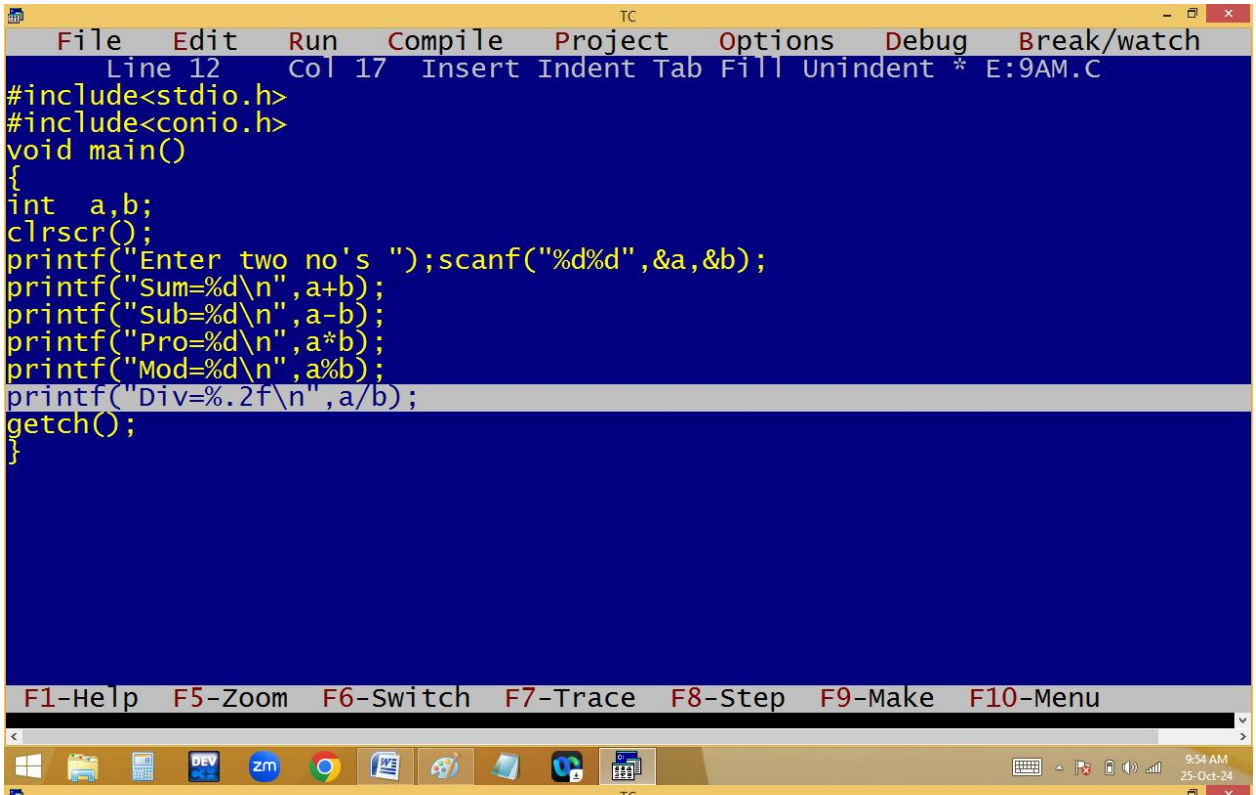
[+ , -, *, %, /]:

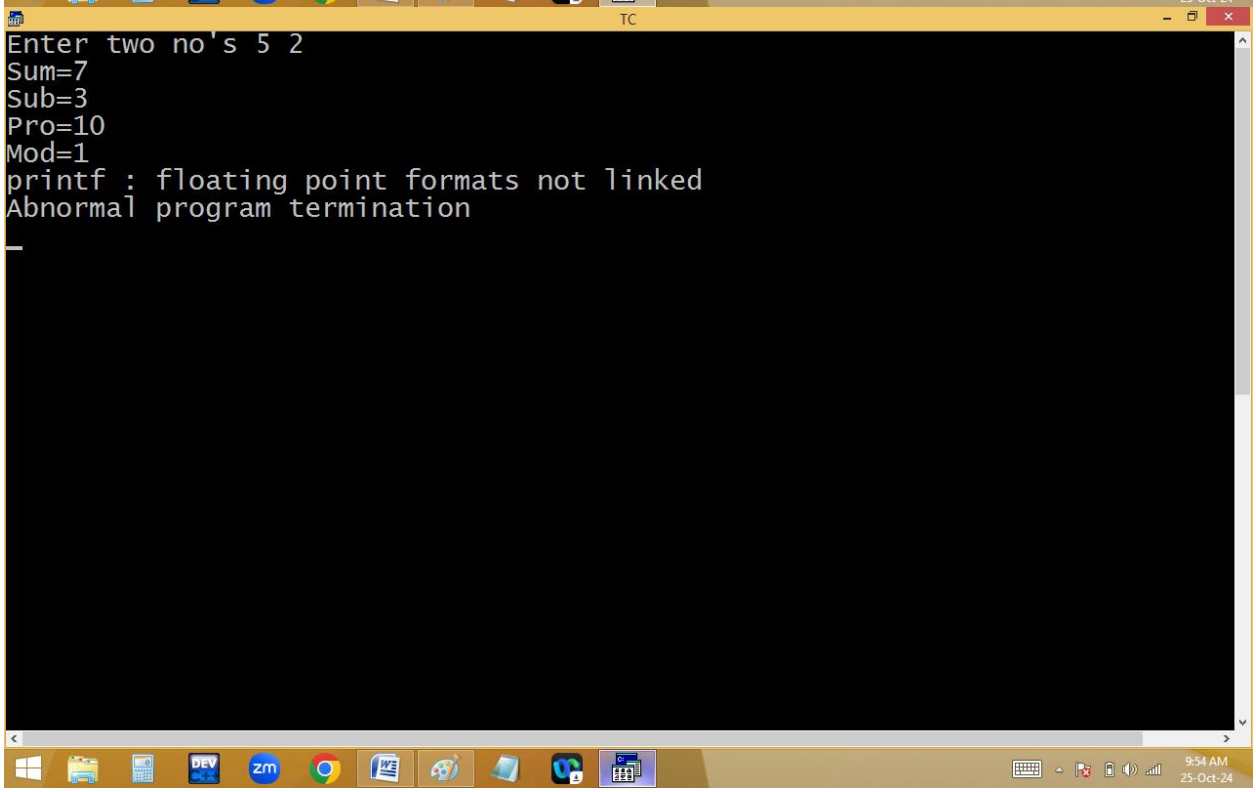

TC
File Edit Run Compile Project Options Debug Break/watch
Line 17 Col 12 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,c,d,e,f,g;
clrscr();
printf("Enter two no's ");scanf("%d%d",&a,&b);
c=a+b;
d=a-b;
e=a*b;
f=a%b;
g=a/b;
printf("Sum=%d\n",c);
printf("Sub=%d\n",d);
printf("Pro=%d\n",e);
printf("Mod=%d\n",f);
printf("Div=%d\n",g);
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu

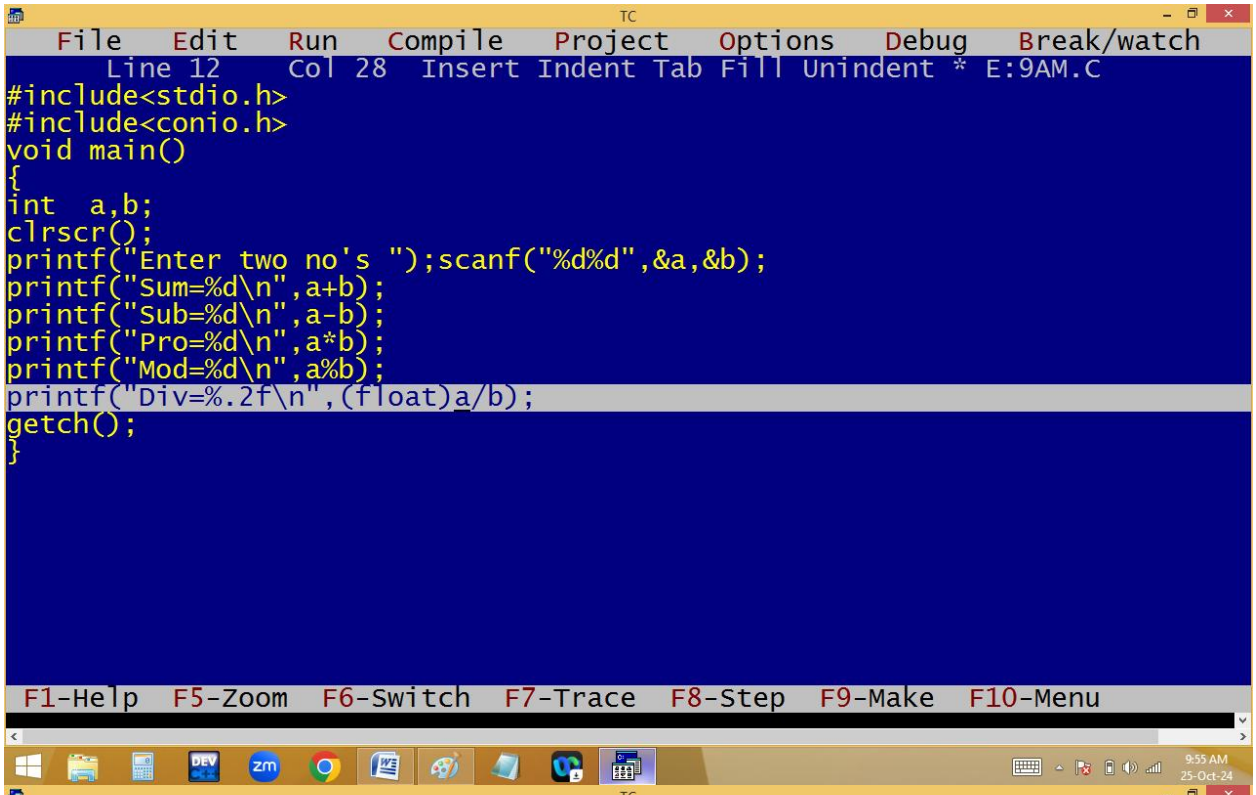

TC
Enter two no's 5 2
Sum=7
Sub=3
Pro=10
Mod=1
Div=2

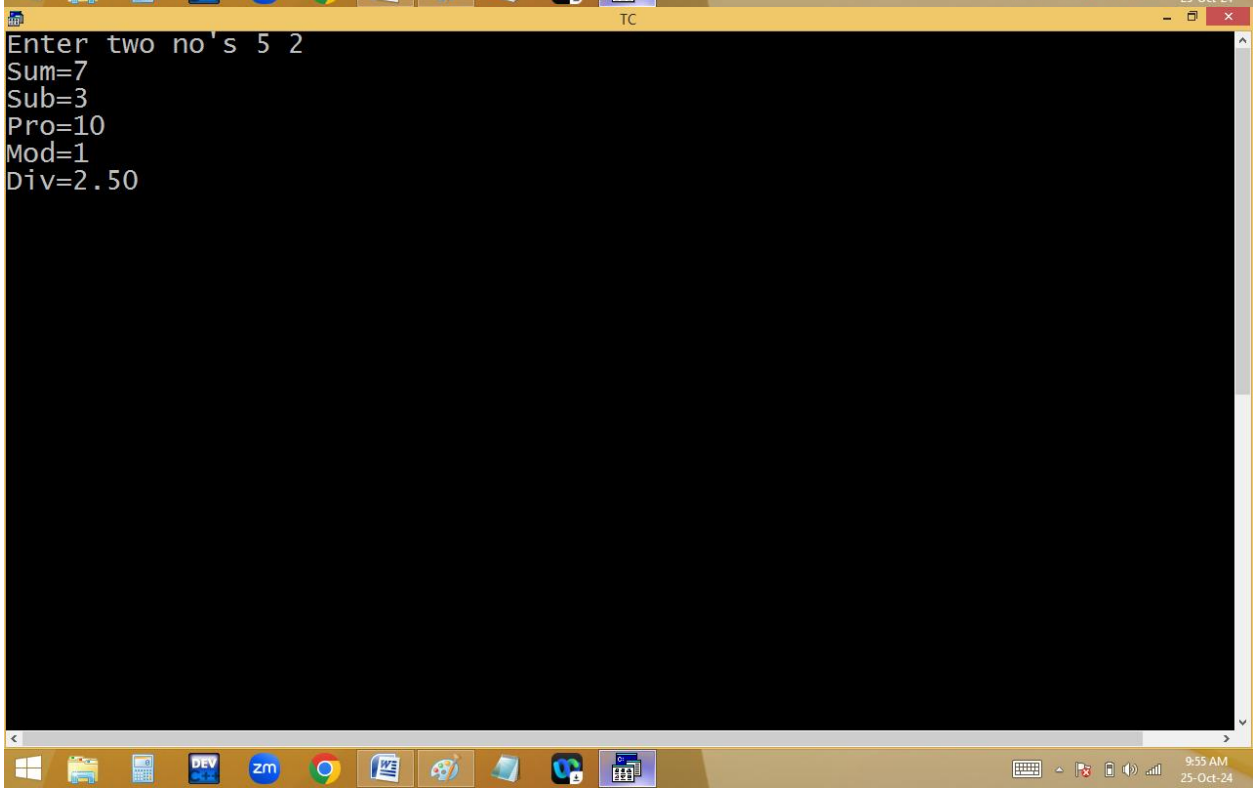

TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 22 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b;
clrscr();
printf("Enter two no's ");scanf("%d%d",&a,&b);
printf("Sum=%d\n",a+b);
printf("Sub=%d\n",a-b);
printf("Pro=%d\n",a*b);
printf("Mod=%d\n",a%b);
printf("Div=%d\n",a/b);
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu

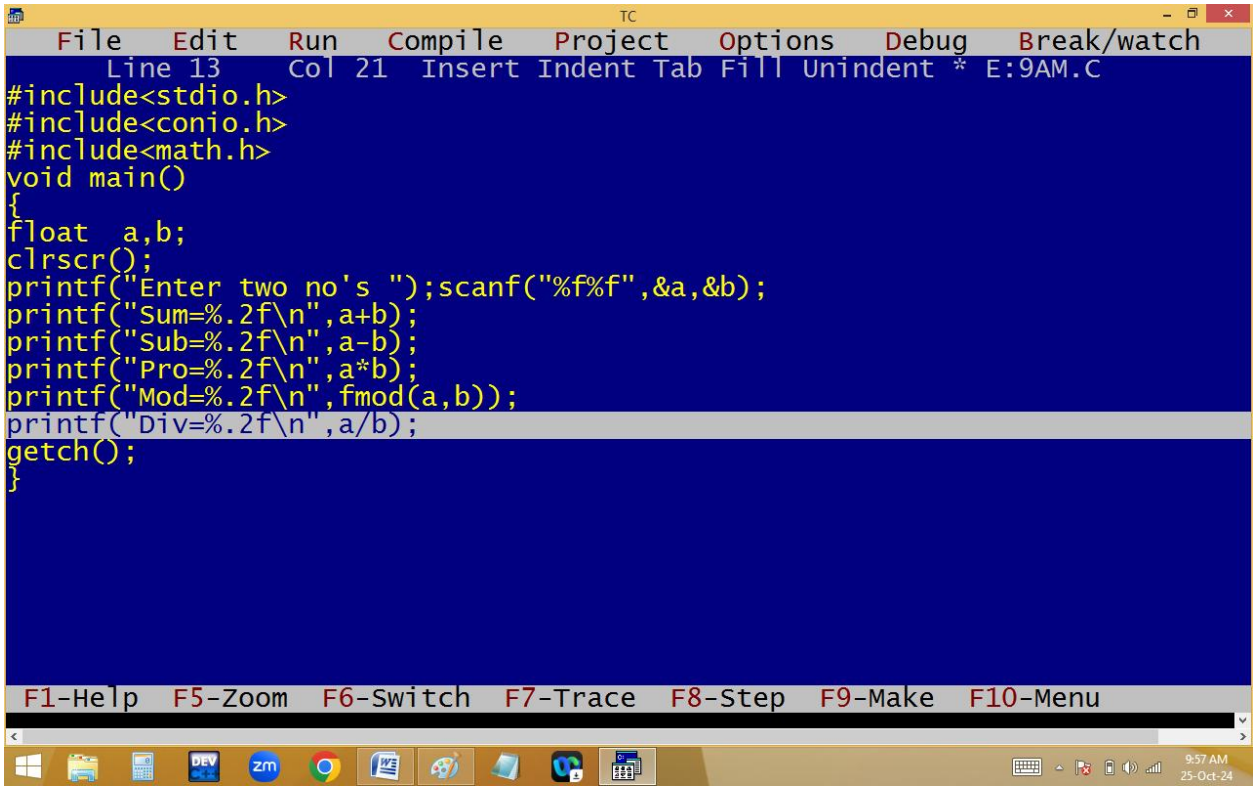

TC
Enter two no's 5 2
Sum=7
Sub=3
Pro=10
Mod=1
Div=2

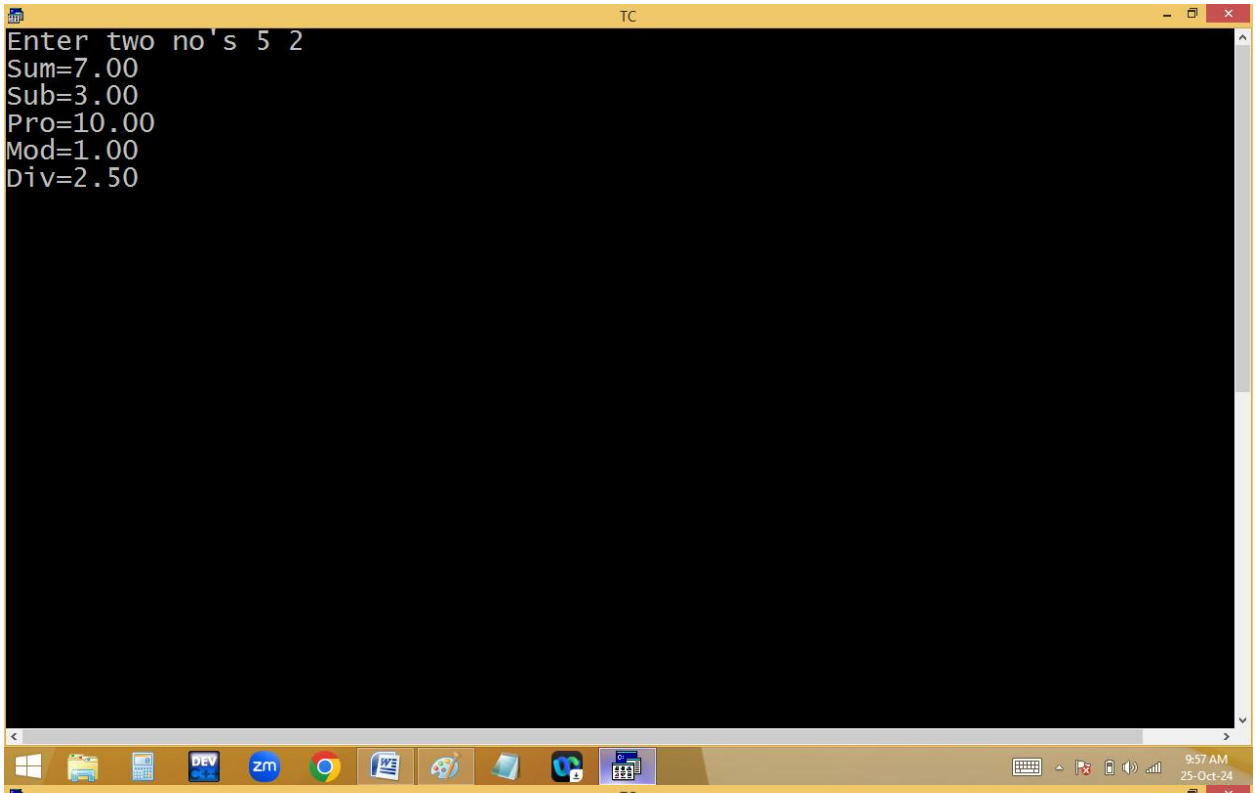

TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 17 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b;
clrscr();
printf("Enter two no's ");scanf("%d%d",&a,&b);
printf("Sum=%d\n",a+b);
printf("Sub=%d\n",a-b);
printf("Pro=%d\n",a*b);
printf("Mod=%d\n",a%b);
printf("Div=%.2f\n",a/b);
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu

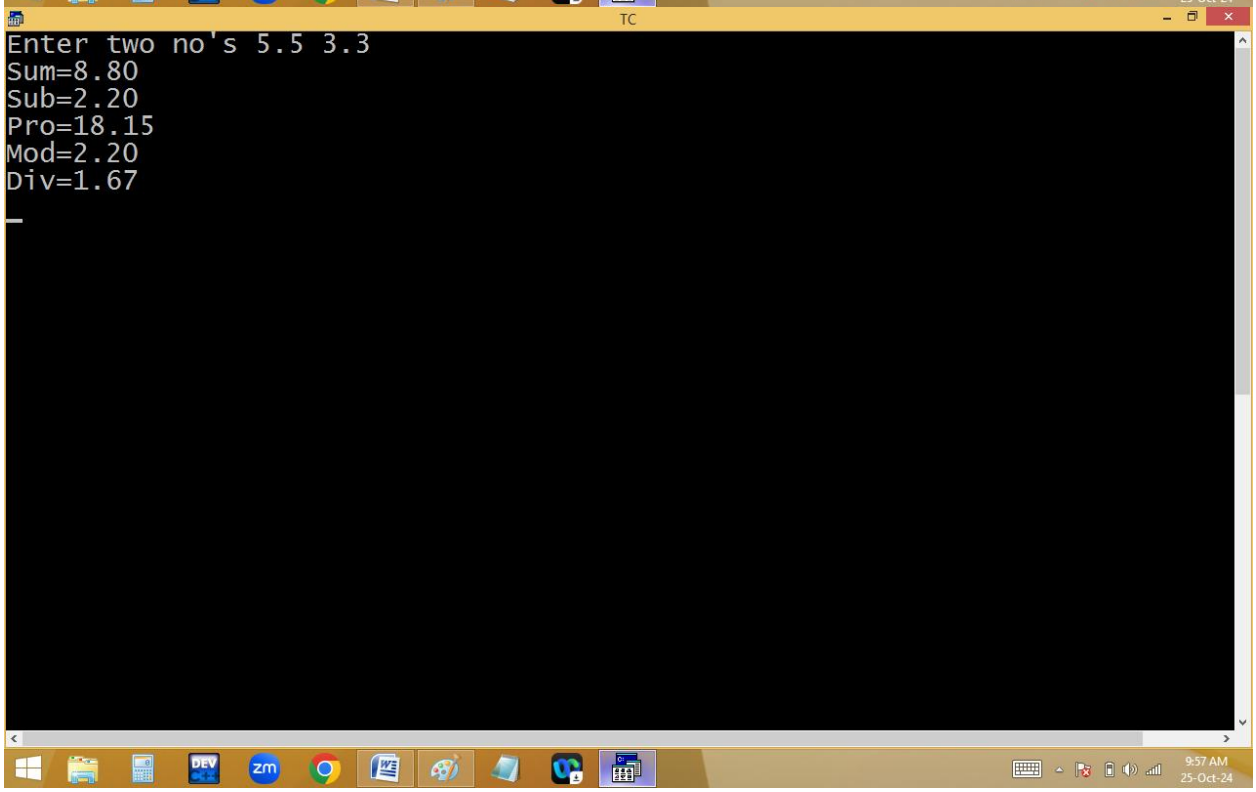

TC
Enter two no's 5 2
Sum=7
Sub=3
Pro=10
Mod=1
printf : floating point formats not linked
Abnormal program termination


TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 28 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b;
clrscr();
printf("Enter two no's ");scanf("%d%d",&a,&b);
printf("Sum=%d\n",a+b);
printf("Sub=%d\n",a-b);
printf("Pro=%d\n",a*b);
printf("Mod=%d\n",a%b);
printf("Div=%.2f\n",(float)a/b);
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu

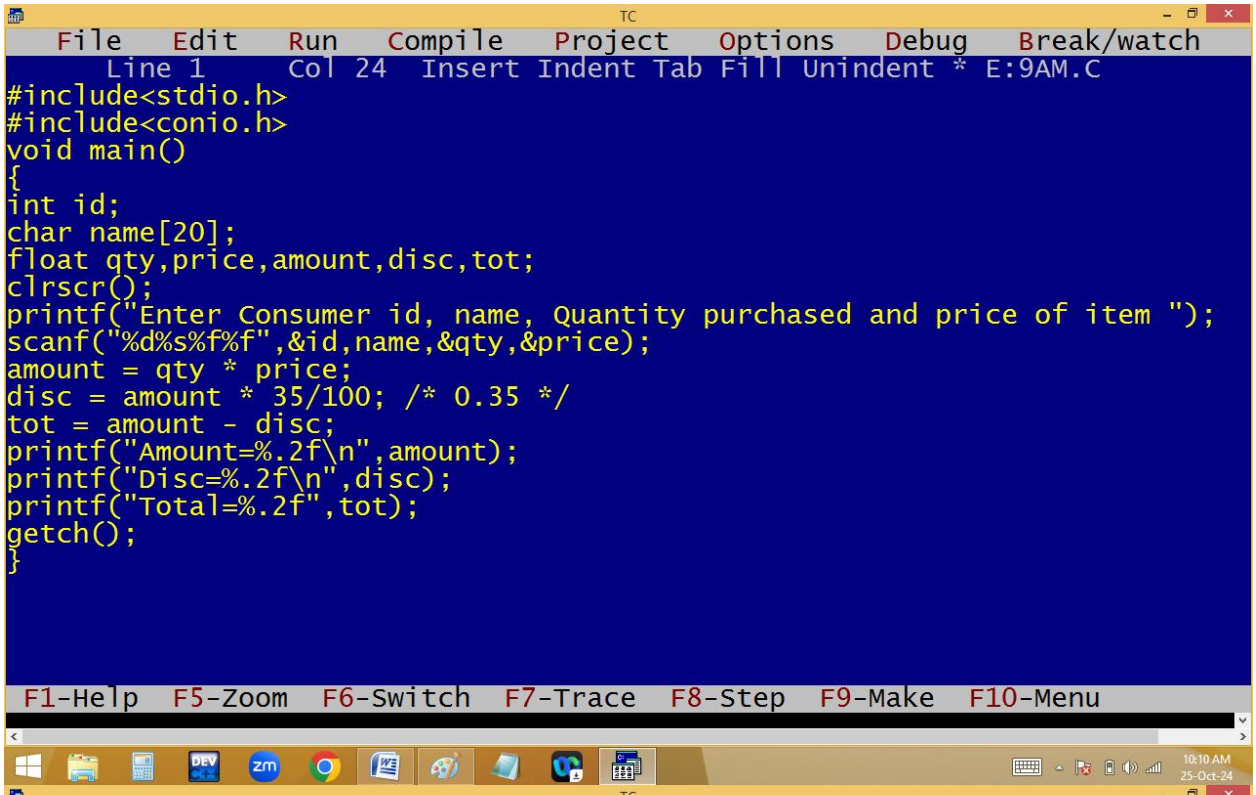

TC
Enter two no's 5 2
Sum=7
Sub=3
Pro=10
Mod=1
Div=2.50

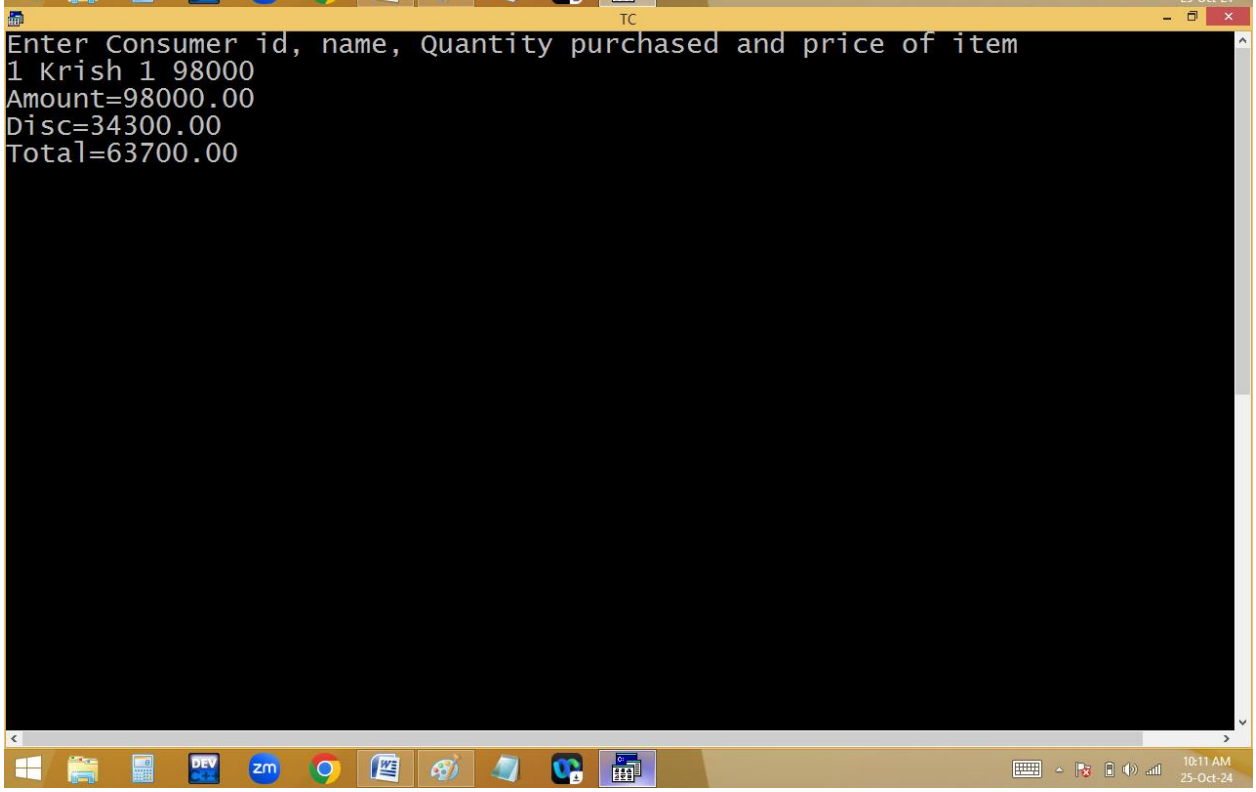

TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 21 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
float a,b;
clrscr();
printf("Enter two no's ");scanf("%f%f",&a,&b);
printf("Sum=%.2f\n",a+b);
printf("Sub=%.2f\n",a-b);
printf("Pro=%.2f\n",a*b);
printf("Mod=%.2f\n",fmod(a,b));
printf("Div=%.2f\n",a/b);
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu
9:57 AM
25-Oct-24



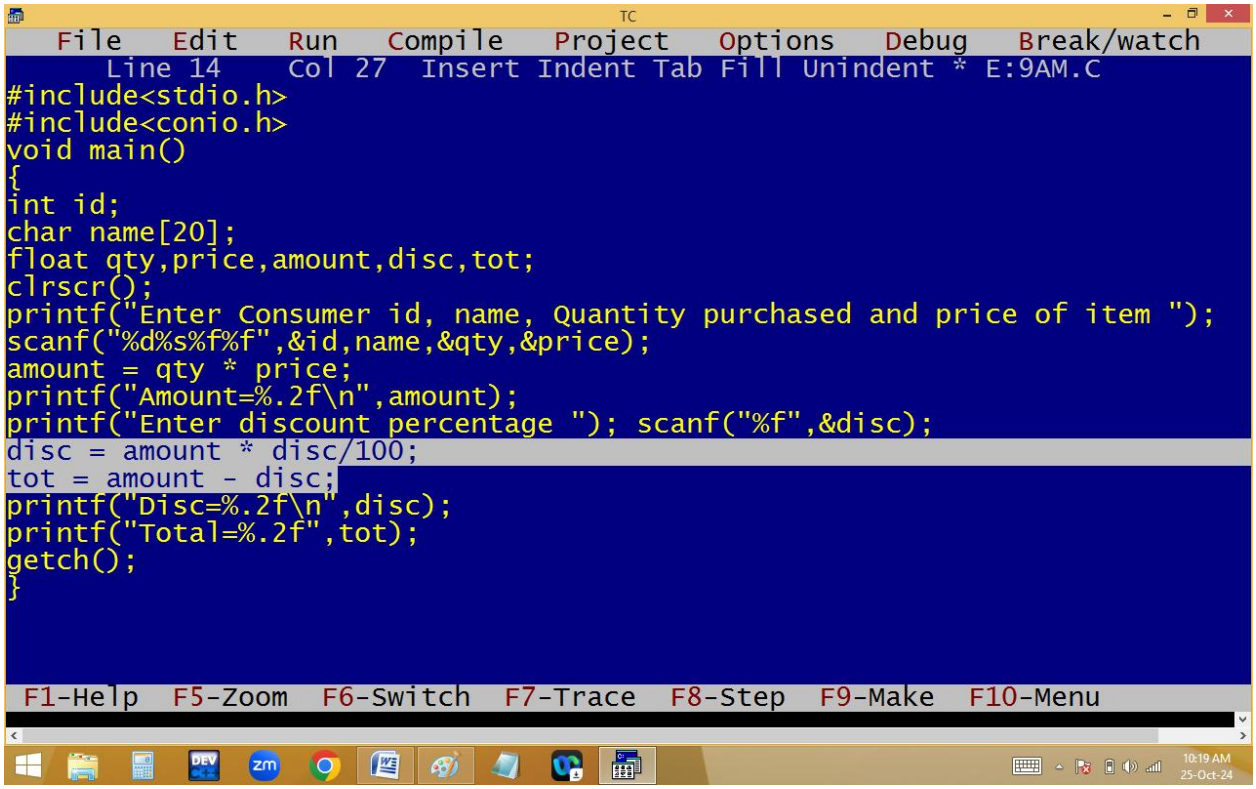


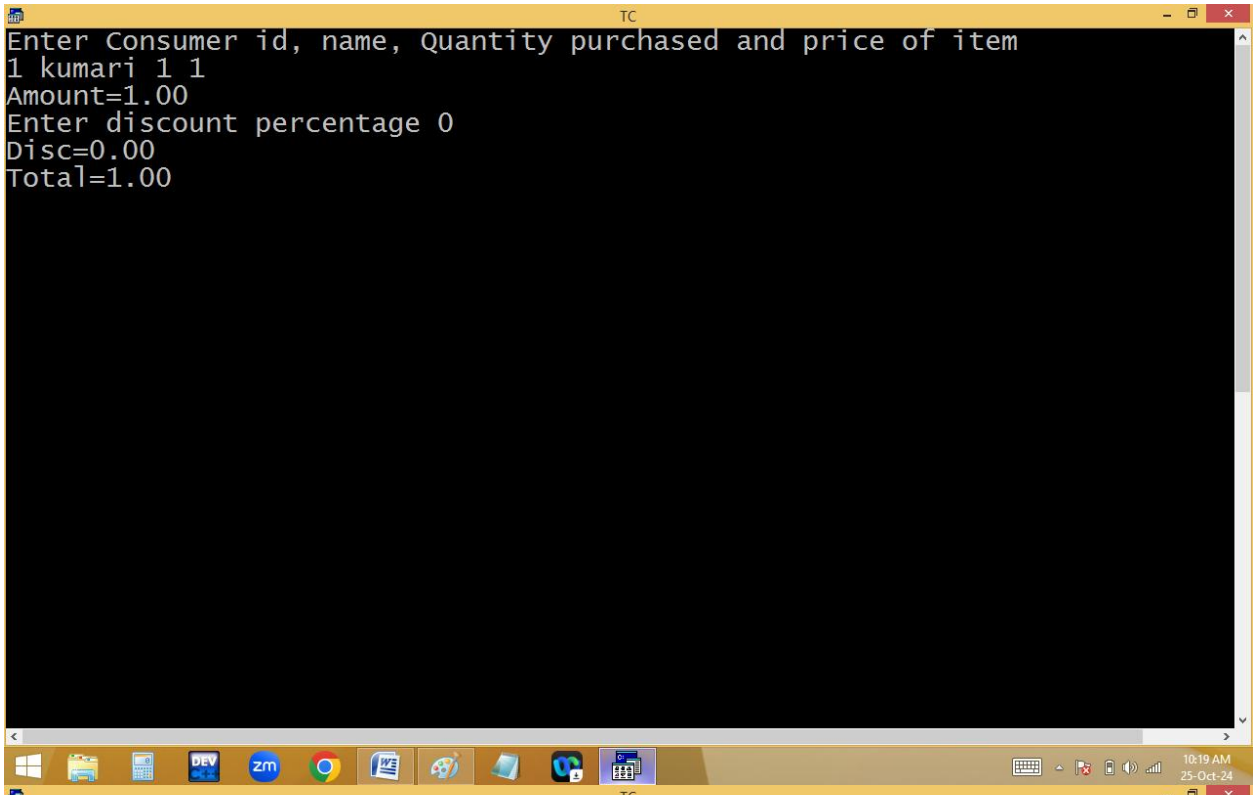
Read a customer id, name, Quantity purchased and rate of item. Find the amount, 35% discount and total.

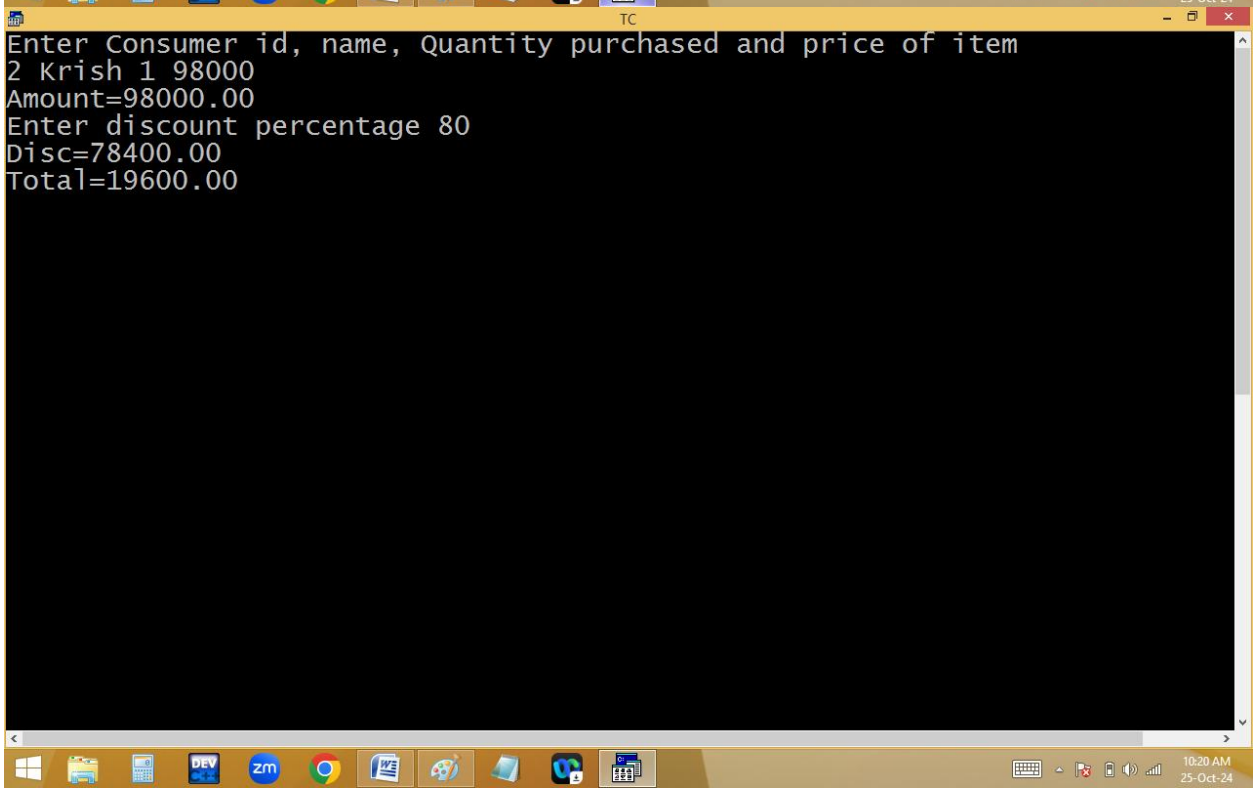

TC
File Edit Run Compile Project Options Debug Break/watch
Line 1 Col 24 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int id;
char name[20];
float qty,price,amount,disc,tot;
clrscr();
printf("Enter Consumer id, name, Quantity purchased and price of item ");
scanf("%d%s%f%f",&id,name,&qty,&price);
amount = qty * price;
disc = amount * 35/100; /* 0.35 */
tot = amount - disc;
printf("Amount=%.2f\n",amount);
printf("Disc=%.2f\n",disc);
printf("Total=%.2f",tot);
getch();
}
F1-Help F5-Zoom F6-Switch F7-Trace F8-Step F9-Make F10-Menu

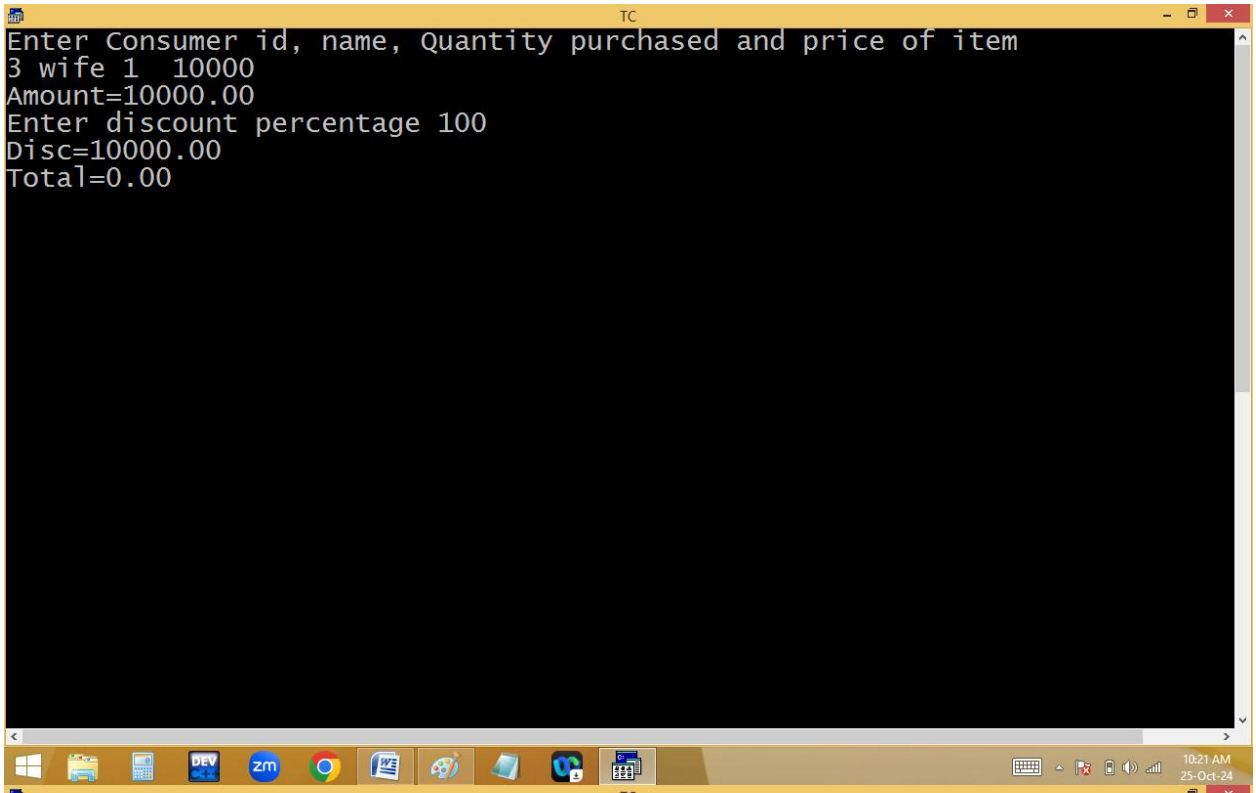

TC
Enter Consumer id, name, Quantity purchased and price of item
1 Krish 1 98000
Amount=98000.00
Disc=34300.00
Total=63700.00

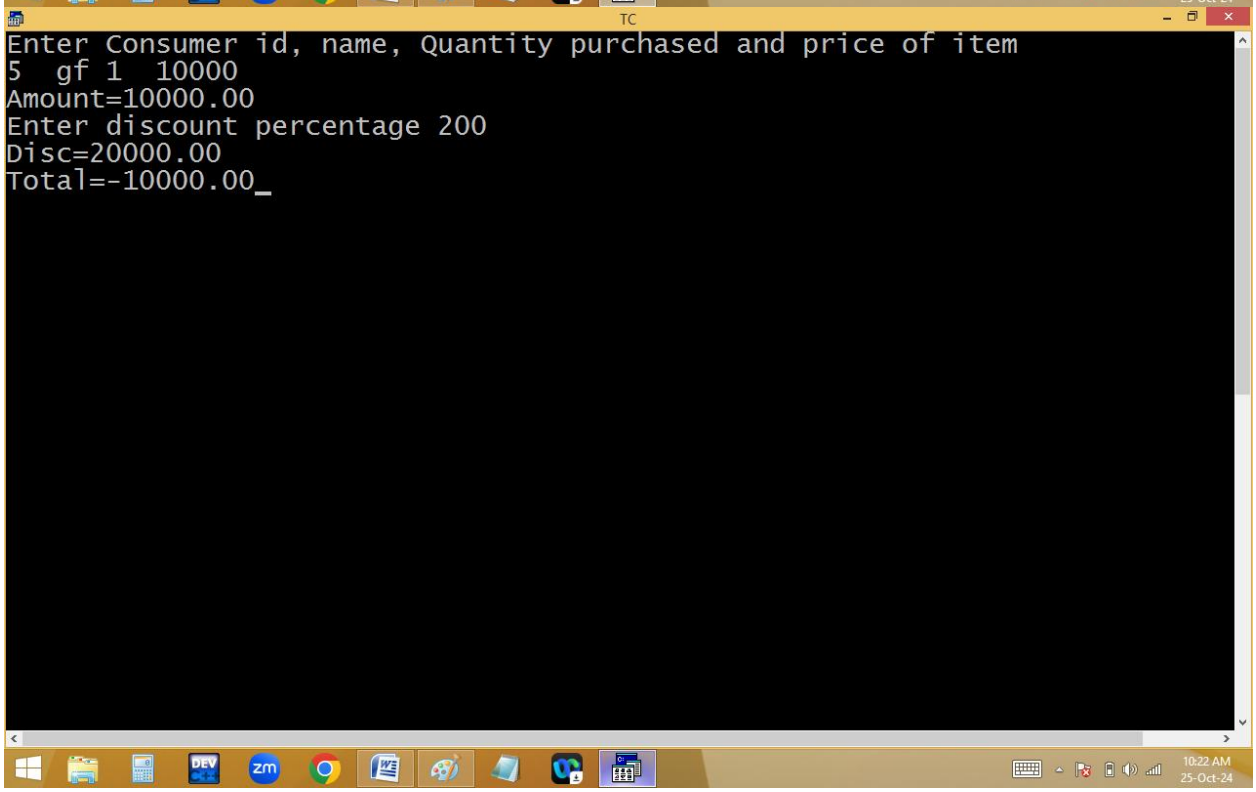
Dynamic discount [runtime]:




TC
Enter Consumer id, name, Quantity purchased and price of item
1 kumari 1 1
Amount=1.00
Enter discount percentage 0
Disc=0.00
Total=1.00


TC
Enter Consumer id, name, Quantity purchased and price of item
2 Krish 1 98000
Amount=98000.00
Enter discount percentage 80
Disc=78400.00
Total=19600.00


TC
Enter Consumer id, name, Quantity purchased and price of item
3 wife 1 10000
Amount=10000.00
Enter discount percentage 100
Disc=10000.00
Total=0.00


TC
Enter Consumer id, name, Quantity purchased and price of item
5 gf 1 10000
Amount=10000.00
Enter discount percentage 200
Disc=20000.00
Total=-10000.00

Variables:

Variable is a container is used to store the values in our programs.

Variable is a named memory [bytes] where we can store and manipulate [modify] the values in our programs.

All the variables are stored in primary memory i.e. RAM Only. Due to this the variables are automatically deleted after the function / program execution. i.e. all the variables are temporary.
in c compiler we should have to declare the variables in first line of any function. In c++ we can declare anywhere.

Every variable is having 2 stages.

1. **Variable declaration / declared**
   Eg: int a;
2. **Variable initialization / defined**
   Eg: a=100;

Syntax:

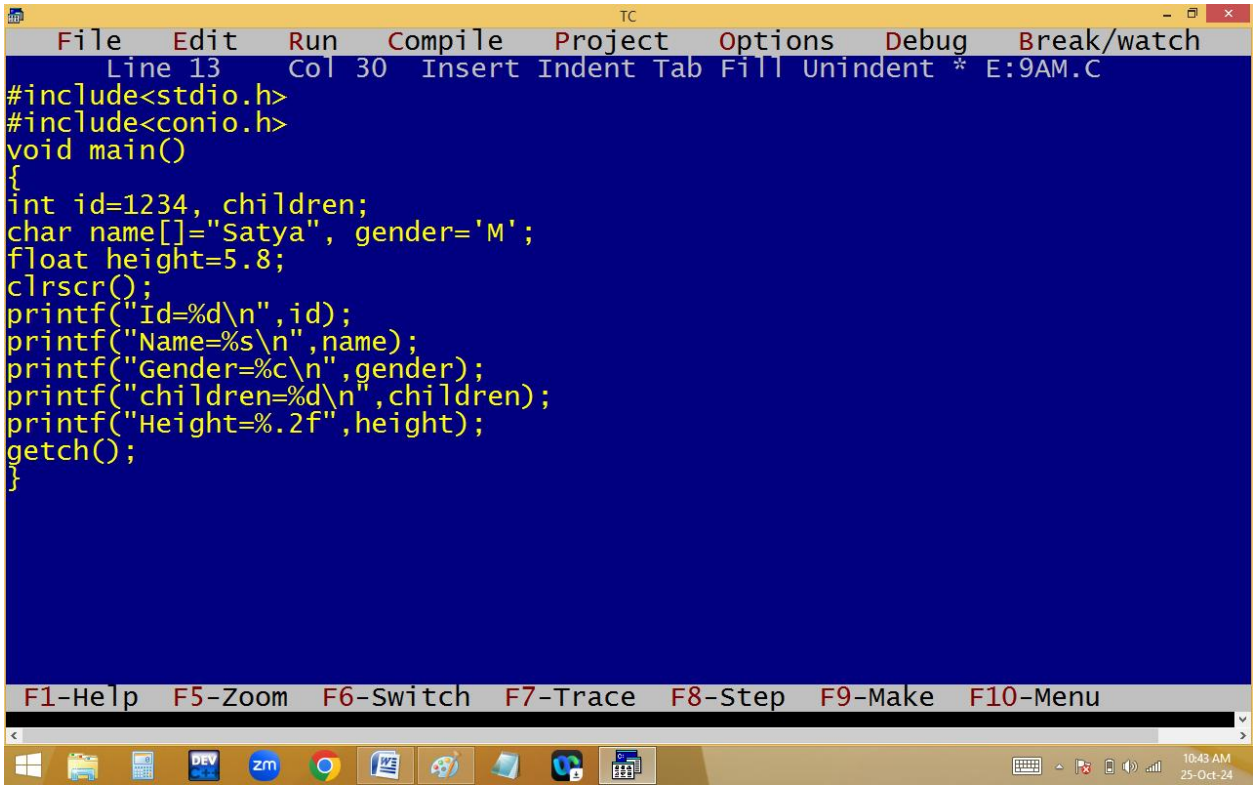
Datatype variable[=value], var[=value],……;

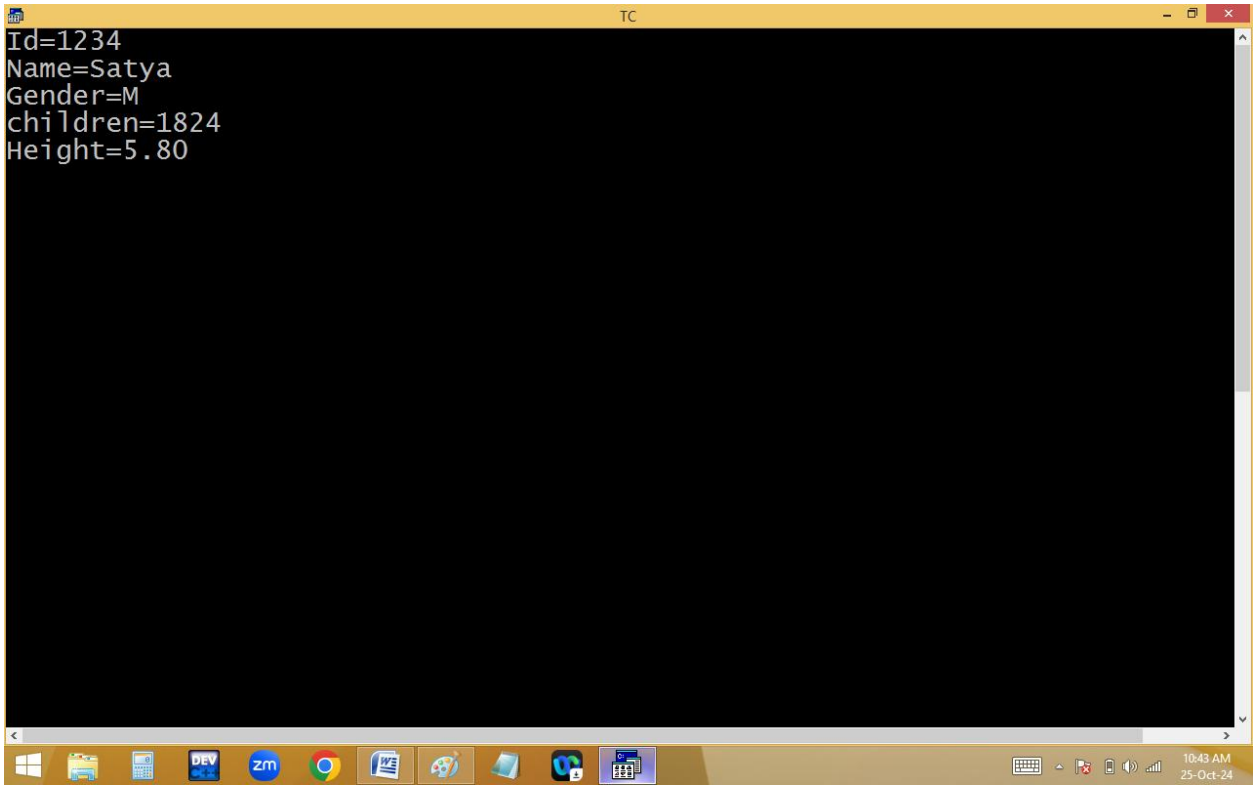
Eg:

int id=1234, children;

char name[]=”Satya”, gender=’M’;

float height = 5.8;





Memory allocation for variables: