

The image shows a screenshot of the Turbo C++ (TC) IDE. The top window is the source code editor, which has a blue background. It displays a C program with the following code:

```
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 33 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("%d + %d = %d\n",1,2,3);
printf("Naresh\\tIT\\nHyd\n");
printf("Naresh\\\\tIT\\\\nHyd\n");
getch();
}
```

The bottom window is the output console, which has a black background. It shows the output of the program:

```
%d + %d = %d
Naresh\\tIT\\nHyd
Naresh\\ IT\\
Hyd
```

Both windows have a taskbar at the bottom with various application icons and a system tray on the right showing the time as 02:35 PM on 06-Aug-23. An "Activate Windows" watermark is visible in the bottom right corner of both windows.

`printf("Naresh\\tIT\\nHyd");`

`Naresh\tIT\nHyd`

`printf("Naresh\\t\\tIT\\t\\nHyd");`

`Naresh\t\tIT\t`

`Hyd`

The image shows a screenshot of the Turbo C++ (TC) IDE. The top window is the source code editor, and the bottom window is the output console. Both windows have a yellow title bar and a menu bar with options: File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The source code editor has a status bar at the top showing 'Line 8 Col 22 Insert Indent Tab Fill Unindent * E:2PM.C'. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
printf("12%c34%c56\n",9,10); /* 9=\t, 10=\n */
printf("\n\"KISHORE\"\n");
printf("%cKISHORE%c\n",34,34);
printf("printf(\"KISHORE\");");
getch();
}
```

The output console shows the execution results:

```
12    34
56
"KISHORE"
"KISHORE"
printf("KISHORE");_
```

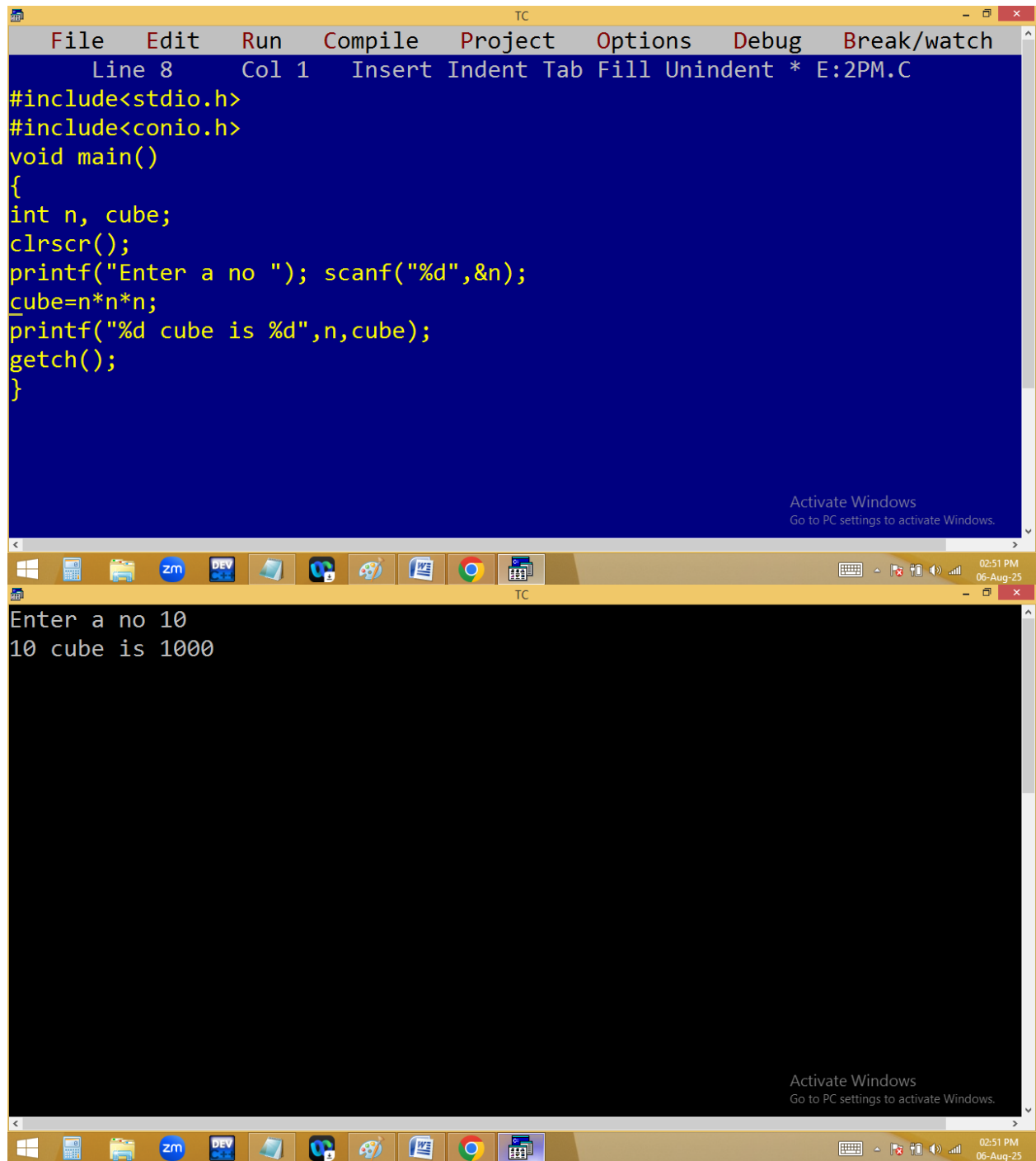
Both windows also display an 'Activate Windows' watermark at the bottom right, with the text 'Go to PC settings to activate Windows.' The Windows taskbar at the bottom shows the time as 02:48 PM on 06-Aug-23.

```
printf("\\"KISHORE\\");
```

```
printf("printf\\"KISHORE\\");");
```

Finding cube value:

n cube → $n * n * n$



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n, cube;
clrscr();
printf("Enter a no "); scanf("%d",&n);
cube=n*n*n;
printf("%d cube is %d",n,cube);
getch();
}
```

Enter a no 10
10 cube is 1000

The image shows a screenshot of the Turbo C++ (TC) IDE. The top window displays the output of a program: "Enter a no 100" followed by "100 cube is 16960". The bottom window shows the source code for "E:2PM.C". The code includes `<stdio.h>` and `<conio.h>`, defines a `main` function, declares `int n;` and `long int cube;`, and uses `clrscr()`, `scanf`, `printf`, and `getch`. The IDE interface includes a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch), a toolbar, and a status bar at the bottom showing the time as 02:52 PM and 06-Aug-23. An "Activate Windows" watermark is visible in the bottom right corner of both windows.

```
Enter a no 100
100 cube is 16960

File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 45 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
long int cube;
clrscr();
printf("Enter a no "); scanf("%d",&n);
cube=(long)n*n*n; /*explicit type casting */
printf("%d cube is %ld",n,cube);
getch();
}
```

The image shows a screenshot of the Turbo C++ (TC) IDE. The top window displays the execution output, and the bottom window shows the source code for a program that calculates the cube of a number.

Execution Output (Top Window):

```
Enter a no 100
100 cube is 1000000_
```

Source Code (Bottom Window):

```
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
long n, cube;
clrscr();
printf("Enter a no "); scanf("%ld",&n);
cube=n*n*n;
printf("%ld cube is %ld",n,cube);
getch();
}
```

Both windows include an "Activate Windows" watermark at the bottom right corner.

The image shows a screenshot of the Turbo C++ (TC) IDE. The top window displays the execution output, and the bottom window shows the source code of the program.

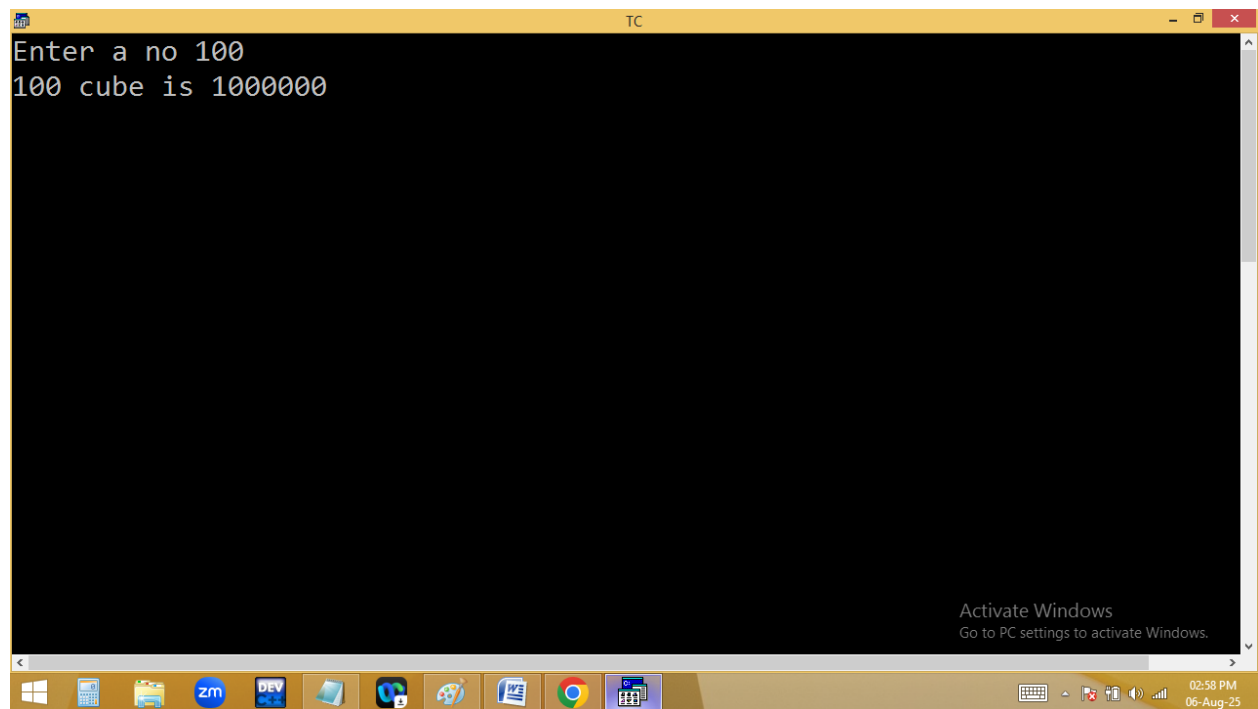
Execution Output (Top Window):

```
Enter a no 100
100 cube is 1000000
```

Source Code (Bottom Window):

```
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 67 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n;
clrscr();
printf("Enter a no "); scanf("%ld",&n);
printf("%d cube is %ld",n,(long)n*n*n);/* explicit type casting */
getch();
}
```

Both windows include an "Activate Windows" watermark at the bottom right corner.

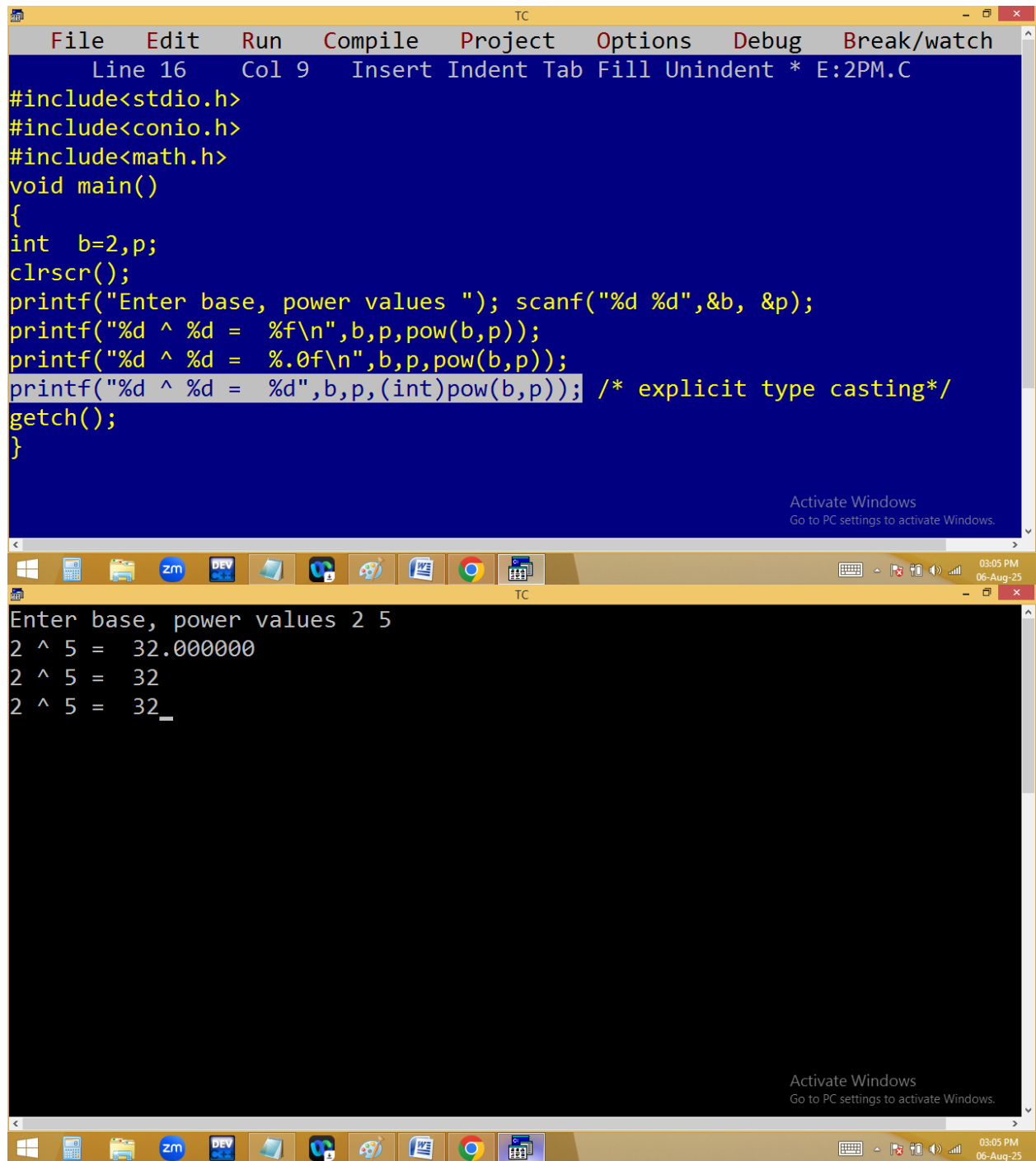


```
Enter a no 100
100 cube is 1000000
```

Activate Windows
Go to PC settings to activate Windows.

02:58 PM
06-Aug-25

Finding power value using pow():



```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 16 Col 9 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
int b=2,p;
clrscr();
printf("Enter base, power values "); scanf("%d %d",&b, &p);
printf("%d ^ %d = %f\n",b,p,pow(b,p));
printf("%d ^ %d = %.0f\n",b,p,pow(b,p));
printf("%d ^ %d = %d",b,p,(int)pow(b,p)); /* explicit type casting*/
getch();
}
```

Enter base, power values 2 5

2 ^ 5 = 32.000000

2 ^ 5 = 32

2 ^ 5 = 32_

Finding area and circumference of a circle.

The image shows a screenshot of the Turbo C++ (TC) IDE. The top window is the editor, displaying a C program for calculating the area and circumference of a circle. The code is as follows:

```
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
#define pi 3.14 /* macro */
void main()
{
float r, area,cf;
clrscr();
printf("Enter circle radius "); scanf("%f",&r);
area = pi * r * r;
cf    = 2 * pi * r;
printf("Area = %.2f, Cf=%.2f",area, cf);
getch();
}
```

The bottom window is the console, showing the program's execution. It prompts the user to enter the circle radius, and the user has entered 10. The program then outputs the calculated area and circumference.

```
Enter circle radius 10
Area = 314.00, Cf=62.80
```

Both windows include a status bar at the bottom with the text "Activate Windows Go to PC settings to activate Windows." and a taskbar at the very bottom of the screen.

```
TC - exit - exit
File Edit Run Compile Project Options Debug Break/watch
Line 5 Col 25 Insert Indent Tab Fill Unindent E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
const float pi = 3.14; _
float r=10, area,cf;
clrscr();
printf("Enter circle radius "); scanf("%f",&r);
area = pi * r * r;
cf = 2 * pi * r;
printf("Area = %.2f, Cf=%.2f",area, cf);
getch();
}

Enter circle radius 2
Area = 12.56, Cf=12.56
```

Take 2 numbers and perform all arithmetic operations[+,-,*,%,/]:

The image displays two screenshots of a Turbo C++ (TC) IDE. The top screenshot shows the source code of a C program. The bottom screenshot shows the program's output after execution.

Top Screenshot: Source Code

```
TC - exit - exit
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 24 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b;
clrscr();
printf("Enter a, b values "); scanf("%d %d",&a, &b);
printf("Sum=%d\n",a+b);
printf("Sub=%d\n",a-b);
printf("Mul=%d\n",a*b);
printf("Mod=%d\n",a%b);
printf("Div=%d\n",a/b);
getch();
}
```

Bottom Screenshot: Program Output

```
TC - exit - exit
Enter a, b values 10 2
Sum=12
Sub=8
Mul=20
Mod=0
Div=5
```

Both screenshots include a Windows taskbar at the bottom with the date 06-Aug-23 and time 03:22 PM. An "Activate Windows" watermark is visible in the bottom right corner of each window.

The image shows a screenshot of the Turbo C++ (TC) IDE. The top window, titled "TC - exit - exit", displays the output of a program. The output text is: "Enter a, b values 5 2", "Sum=7", "Sub=3", "Mul=10", "Mod=1", and "Div=2". The bottom window, also titled "TC - exit - exit", shows the source code of the program. The code includes headers for `stdio.h` and `conio.h`, and defines a `main` function. Inside `main`, it declares two integers `a` and `b`, clears the screen with `clrscr()`, and uses `scanf` to read two integers. It then uses `printf` to display the sum, difference, product, modulus, and division of the two numbers. The division result is formatted to two decimal places using `%.2f`. The code ends with `getch()` to pause the execution. The IDE's menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the bottom shows the current line and column (Line 12, Col 29) and the file name (E:2PM.C). The Windows taskbar at the very bottom shows the system clock as 03:22 PM on 06-Aug-23.

```
Enter a, b values 5 2
Sum=7
Sub=3
Mul=10
Mod=1
Div=2

File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 29 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b;
clrscr();
printf("Enter a, b values "); scanf("%d %d",&a, &b);
printf("Sum=%d\n",a+b);
printf("Sub=%d\n",a-b);
printf("Mul=%d\n",a*b);
printf("Mod=%d\n",a%b);
printf("Div=%.2f\n",(float)a/b);
getch();
}
```

```
TC - exit - exit
Enter a, b values 5 2
Sum=7
Sub=3
Mul=10
Mod=1
Div=2.50
Activate Windows
Go to PC settings to activate Windows.
```

```
TC - exit - exit
File Edit Run Compile Project Options Debug Break/watch
Line 3 Col 17 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
#include<math.h>_
void main()
{
float a,b;
clrscr();
printf("Enter a, b values "); scanf("%f %f",&a, &b);
printf("Sum=%.2f\n",a+b);
printf("Sub=%.2f\n",a-b);
printf("Mul=%.2f\n",a*b);
printf("Mod=%.2f\n",fmod(a,b));
printf("Div=%.2f\n",a/b);
getch();
}
```

Activate Windows
Go to PC settings to activate Windows.

```
TC - exit - exit
Enter a, b values 3.3 2.2
Sum=5.50
Sub=1.10
Mul=7.26
Mod=1.10
Div=1.50
_
```

Read a baby age in no of days and find the baby age in years, months, weeks and days.

$$y = \text{tdays} / 365 = 1$$

$$m = \text{tdays} \% 365 = 135 / 30 = 4$$

$$w = \text{tdays} \% 365 = 135 \% 30 = 15 / 7 = 2$$

$$d = \text{tdays} \% 365 = 135 \% 30 = 15 \% 7 = 1$$

$$\begin{array}{r} \text{t days} \\ 365 \overline{) 500} \quad (1-Y \\ \underline{365} \\ 135 \\ 30 \overline{) 135} \quad (4-M \\ \underline{120} \\ 15 \\ 7 \overline{) 15} \quad (2-W \\ \underline{14} \\ 1-D \end{array}$$

The image shows a Turbo C++ IDE window titled "TC - exit - exit". The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates "Line 12 Col 68 Insert Indent Tab Fill Unindent * E:2PM.C".

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int tdays,y,m,w,d;
    clrscr();
    printf("Enter baby age in days "); scanf("%d",&tdays);
    y=tdays/365;
    m=tdays%365/30;
    w=tdays%365%30/7;
    d=tdays%365%30%7;
    printf("Baby age %d years %d months %d weeks and %d days",y,m,w,d);_
    getch();
}
```

The output window below shows the execution results:

```
Enter baby age in days 500
Baby age 1 years 4 months 2 weeks and 1 days
```

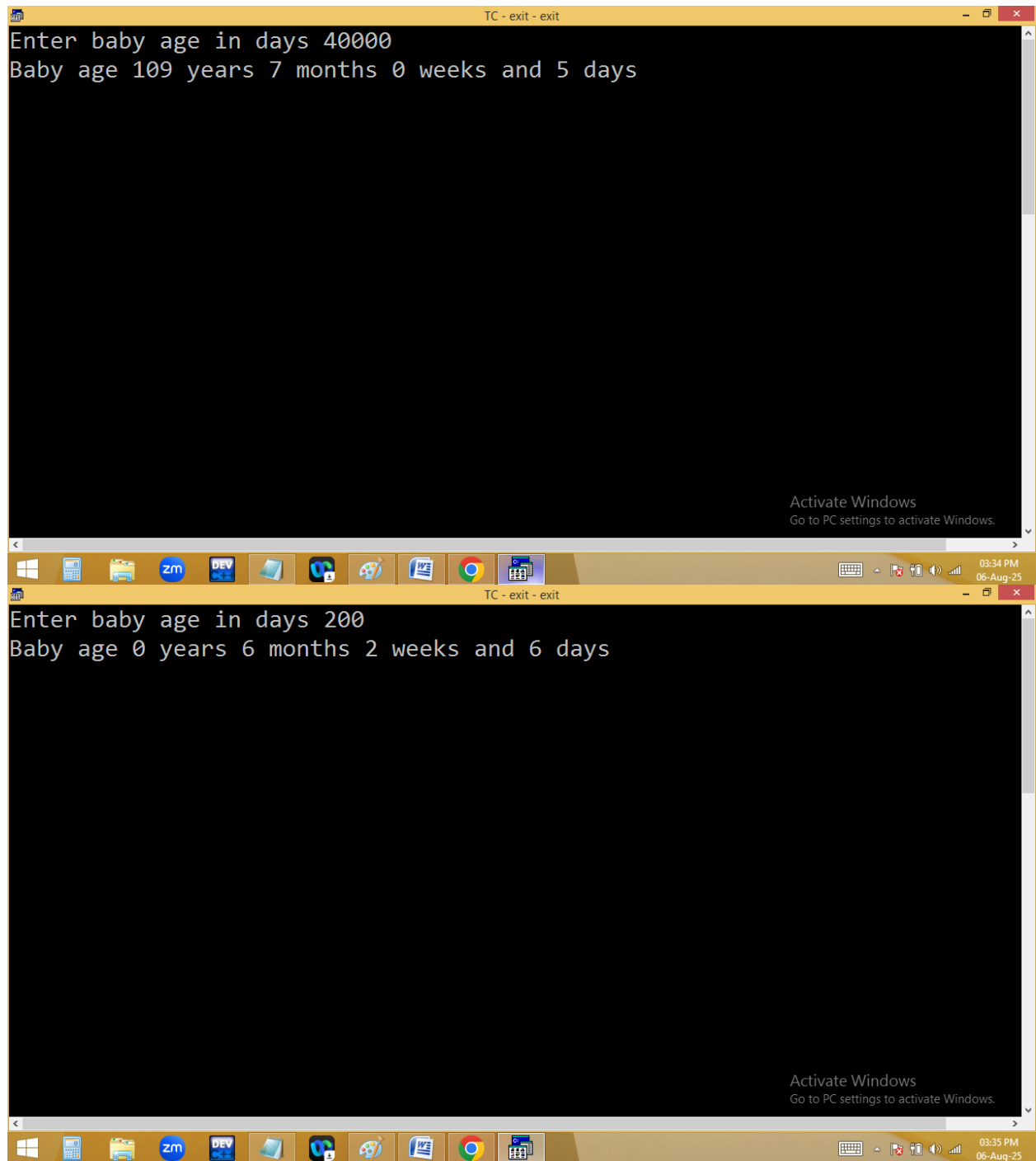
Both windows include an "Activate Windows" watermark at the bottom right, stating "Go to PC settings to activate Windows." The Windows taskbar at the bottom shows the time as 03:32 PM on 06-Aug-25.

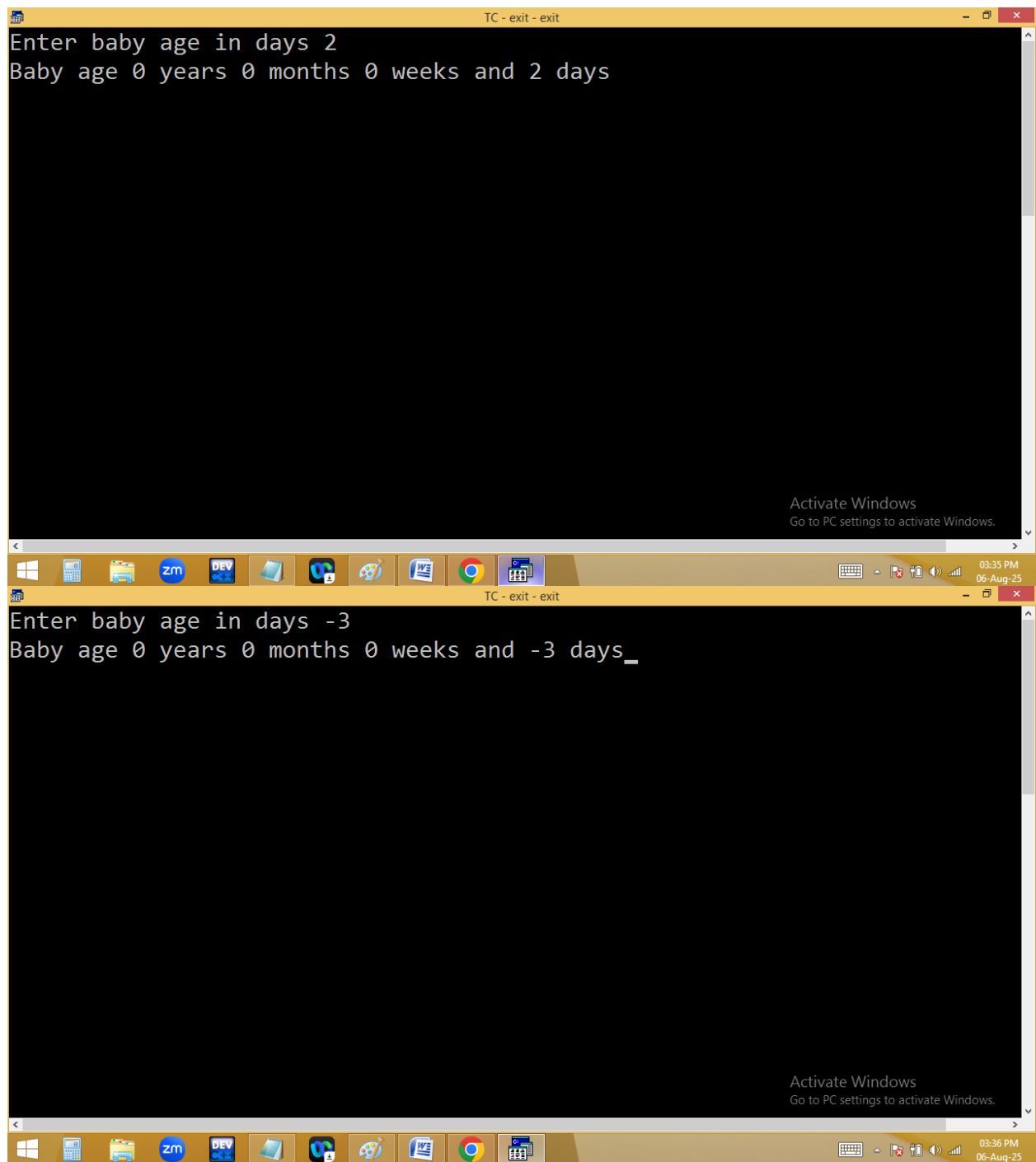
```
TC - exit - exit
Enter baby age in days 30000
Baby age 82 years 2 months 1 weeks and 3 days_

Activate Windows
Go to PC settings to activate Windows.
```

```
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 55 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
long int tdays,y,m,w,d;
clrscr();
printf("Enter baby age in days "); scanf("%ld",&tdays);
y=tdays/365;
m=tdays%365/30;
w=tdays%365%30/7;
d=tdays%365%30%7;
printf("Baby age %ld years %ld months %ld weeks and %ld days",y,m,w,d);
getch();
}
```

Activate Windows
Go to PC settings to activate Windows.





Read baby age in years, months, weeks and days. Find baby age in days.

1 year 4 months 2 weeks and 1 day = 500 days

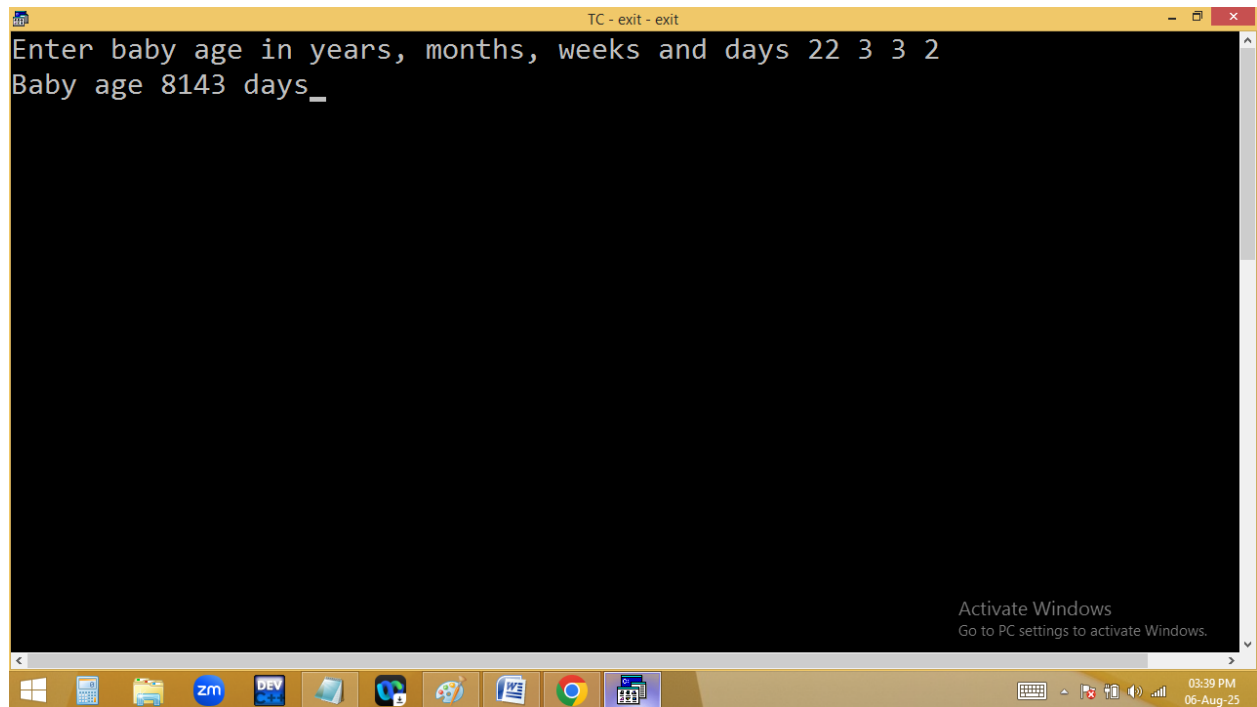
$1 \times 365 + 4 \times 30 + 2 \times 7 + 1 = 500$

The image shows a screenshot of a Turbo C++ IDE window titled "TC - exit - exit". The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates "Line 11 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C". The code editor contains the following C program:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    long int tdays,y,m,w,d;
    clrscr();
    printf("Enter baby age in years, months, weeks and days ");
    scanf("%ld%ld%ld%ld",&y,&m,&w,&d);
    tdays=y*365+m*30+w*7+d;
    printf("Baby age %ld days",tdays);
    getch();
}
```

Below the code editor, the program's output is displayed in a black window titled "TC - exit - exit". The output shows the prompt "Enter baby age in years, months, weeks and days" followed by the input "1 4 2 1", and then the result "Baby age 500 days".

Both windows include an "Activate Windows" watermark in the bottom right corner, stating "Go to PC settings to activate Windows." The Windows taskbar at the bottom shows the time as 03:38 PM on 06-Aug-25.

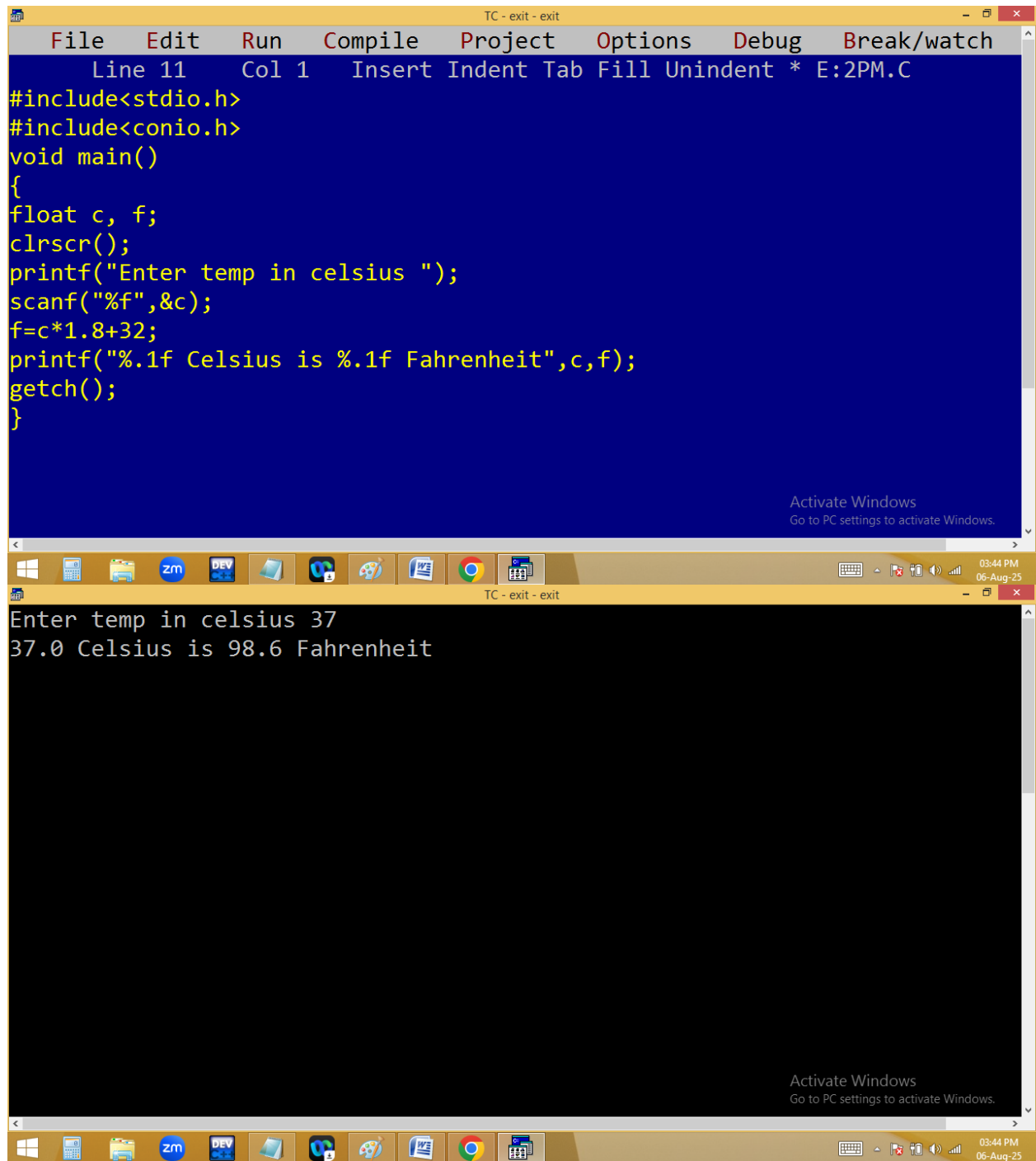


The image shows a Windows 10 desktop environment. A terminal window titled "TC - exit - exit" is open, displaying the text "Enter baby age in years, months, weeks and days 22 3 3 2" and "Baby age 8143 days_". The taskbar at the bottom contains icons for the Start menu, File Explorer, Microsoft Edge, Zoom, DEV, and several other applications. The system tray on the right shows the time as 03:39 PM and the date as 06-Aug-25. A watermark "Activate Windows" is visible in the bottom right corner of the terminal window.

```
TC - exit - exit
Enter baby age in years, months, weeks and days 22 3 3 2
Baby age 8143 days_
Activate Windows
Go to PC settings to activate Windows.
```

Read temp in Celsius and find Fahrenheit:

$$F = c * 1.8 + 32$$



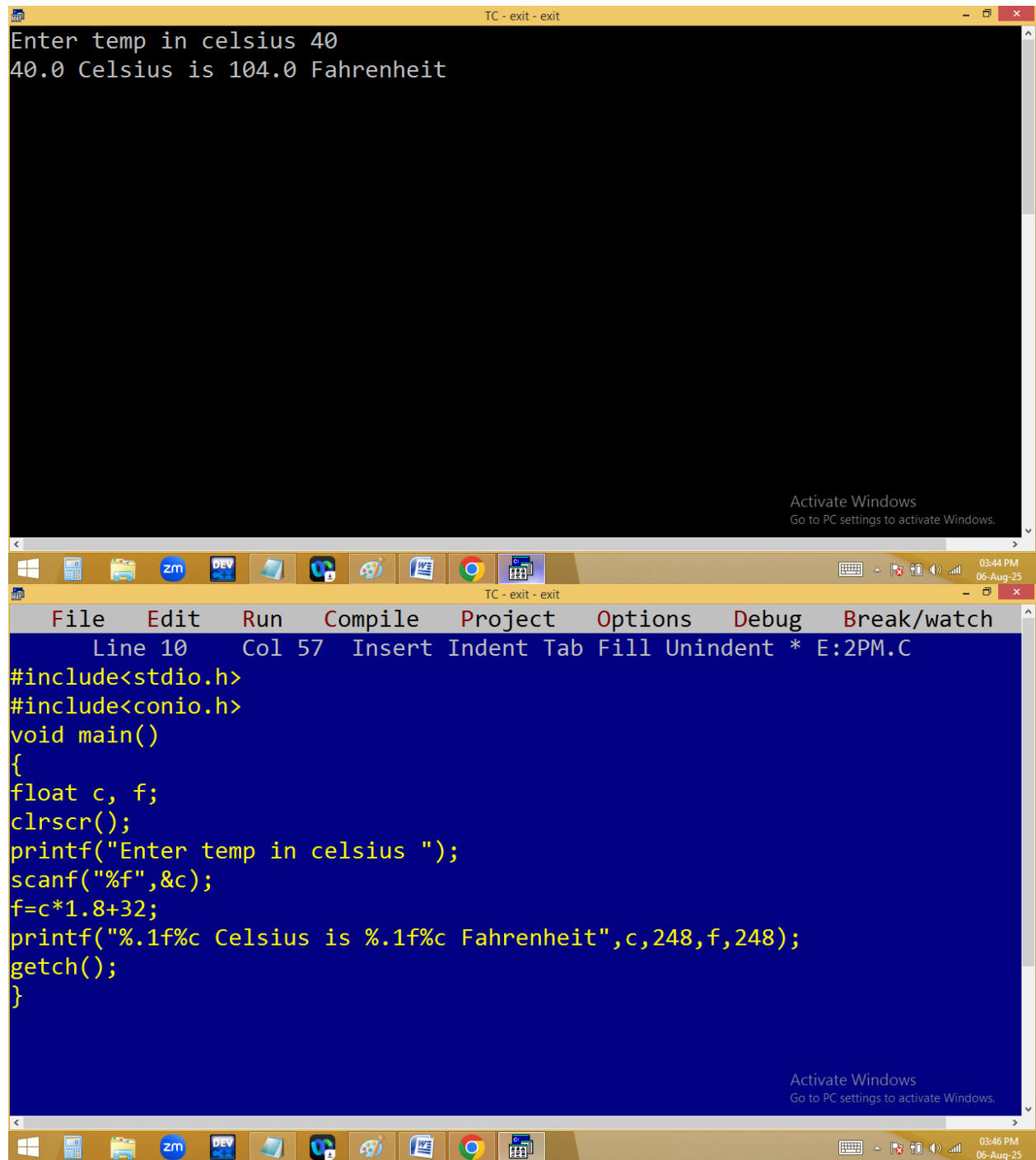
The image shows a Turbo C++ IDE with two windows. The top window, titled "TC - exit - exit", contains the following C code:

```
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 1 Insert Indent Tab Fill Unindent * E:2PM.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();
}
```

The bottom window, also titled "TC - exit - exit", shows the program's output:

```
Enter temp in celsius 37
37.0 Celsius is 98.6 Fahrenheit
```

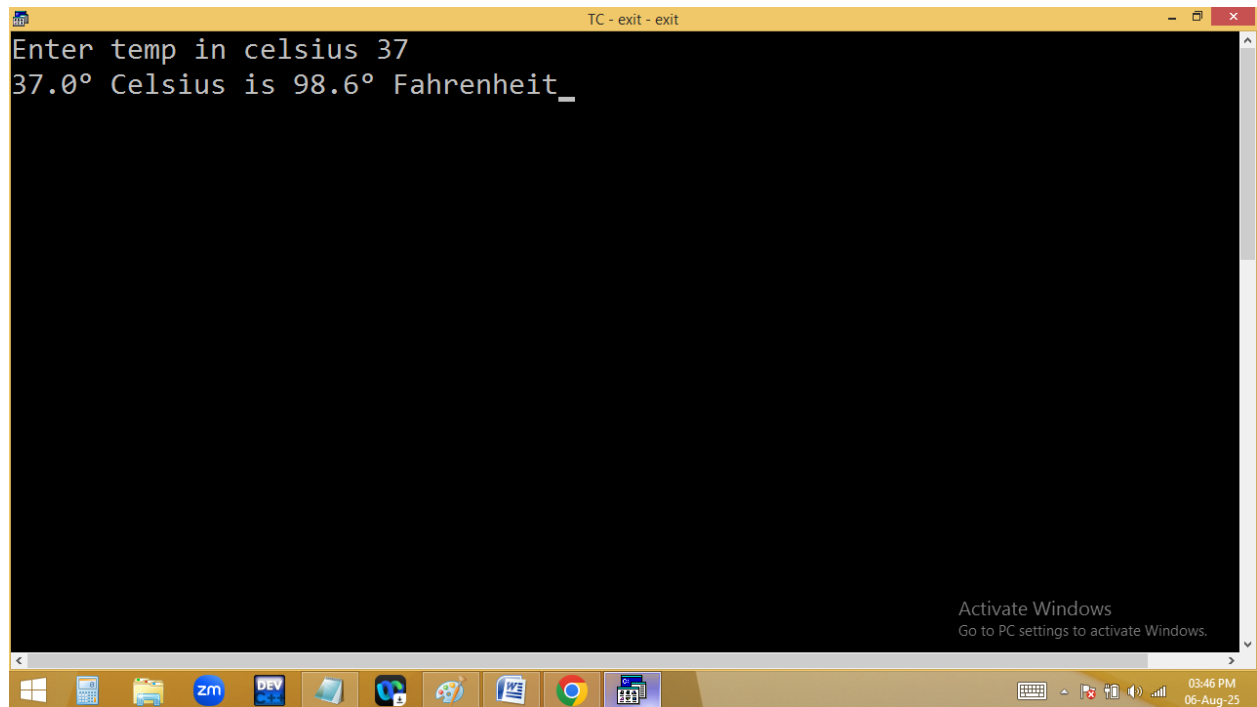
Both windows include a status bar at the bottom with the text "Activate Windows Go to PC settings to activate Windows." and a taskbar at the very bottom showing various application icons and the system clock (03:44 PM, 06-Aug-23).



The image shows a Windows 10 desktop environment. At the top, a command prompt window titled "TC - exit - exit" displays the output of a program: "Enter temp in celsius 40" followed by "40.0 Celsius is 104.0 Fahrenheit". Below this, the Turbo C++ IDE window is open, showing the source code for a file named "E:2PM.C". The IDE's menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar indicates "Line 10 Col 57 Insert Indent Tab Fill Unindent * E:2PM.C". The code in the IDE is as follows:

```
#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();
}
```

The Windows taskbar at the bottom shows various application icons, including the Start button, File Explorer, Microsoft Edge, Zoom, DEV C++, and others. The system tray on the right indicates the time as 03:44 PM on 06-Aug-23. An "Activate Windows" watermark is visible in the bottom right corner of the IDE window.



```
TC - exit - exit
Enter temp in celsius 37
37.0° Celsius is 98.6° Fahrenheit_

Activate Windows
Go to PC settings to activate Windows.
```

Fahrenheit to Celsius:

$$C = f - 32 * 5/9;$$

```
TC - exit - exit
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 51 Insert Indent Tab Fill Unindent * E:2PM.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° Fahrenheit is %.1f Celsius",f,248,c,248);
getch();
}

Enter temp in Fahrenheit 98.6
98.6° Fahrenheit is 37.0 Celsius_
```

Home work:

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