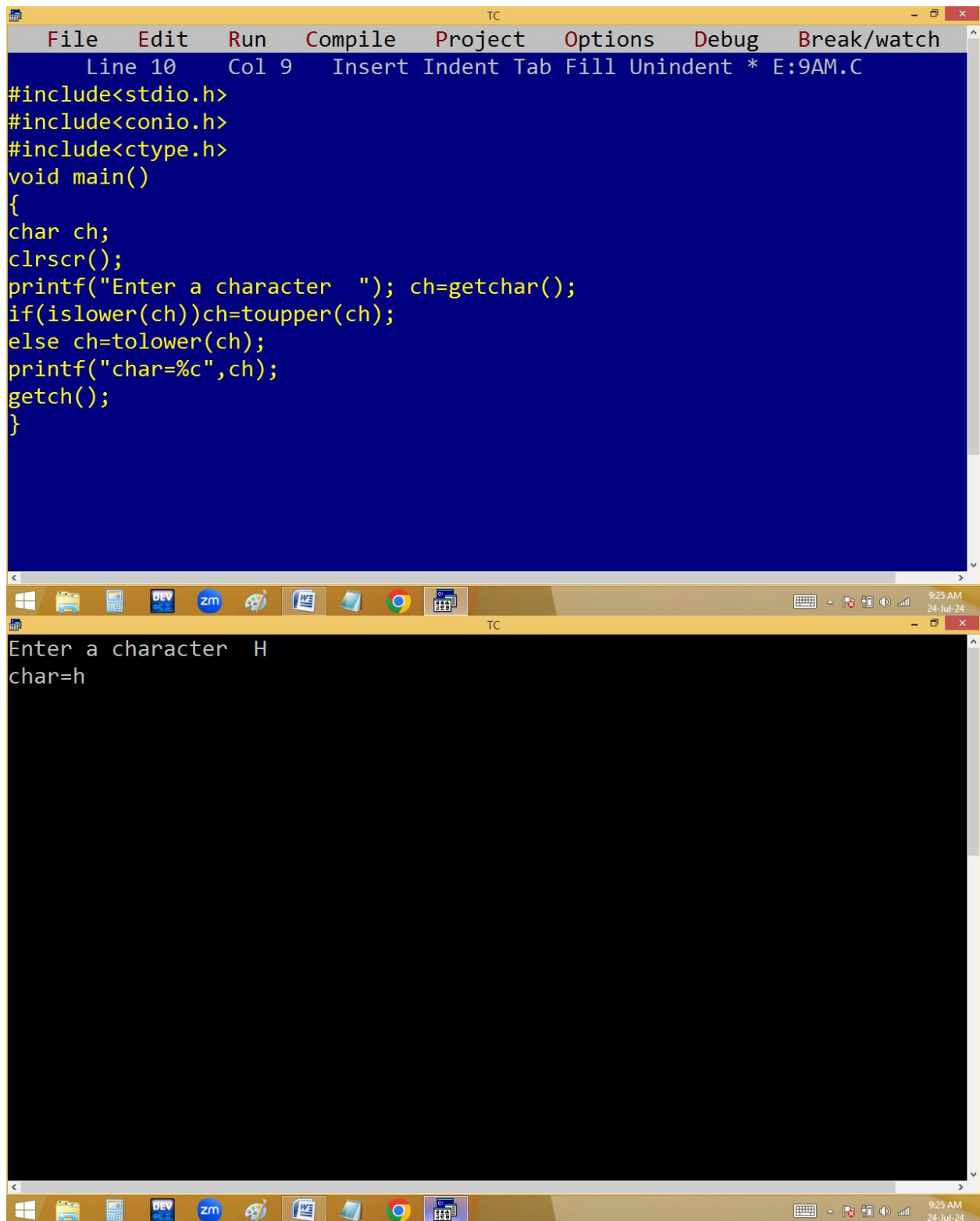


Lower to upper / upper to lower:

Using predefined functions:



The image shows a screenshot of the Turbo C++ (TC) IDE. The top window is the code editor, which has a blue background and contains the following C code:

```
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 9 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
void main()
{
char ch;
clrscr();
printf("Enter a character "); ch=getchar();
if(islower(ch))ch=toupper(ch);
else ch=tolower(ch);
printf("char=%c",ch);
getch();
}
```

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

```
Enter a character H
char=h
```

The Windows taskbar is visible at the bottom of the screen, showing various application icons and the system clock indicating 9:25 AM on 24-Jul-24.

```
TC
Enter a character f
char=F_
```

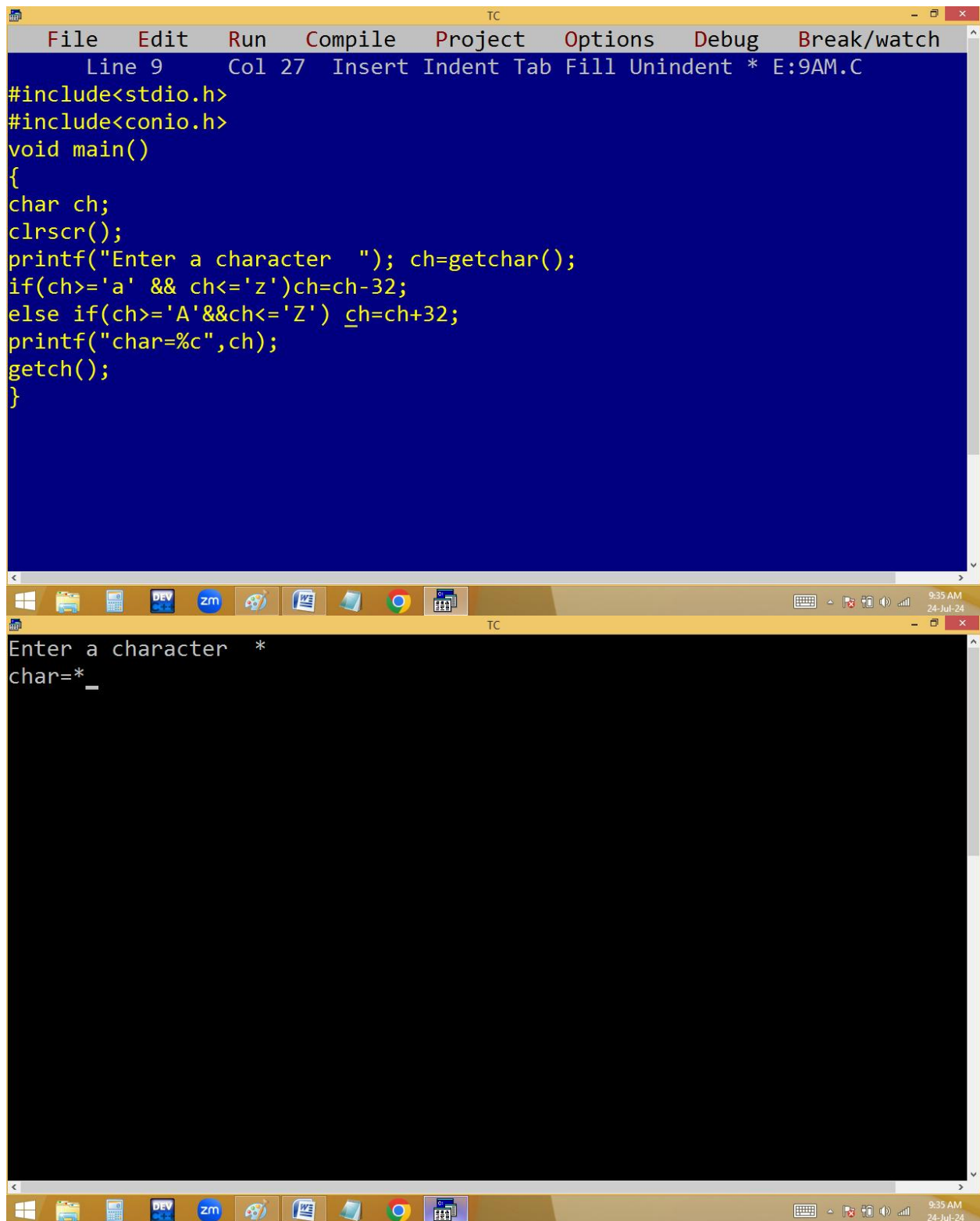
```
TC
Enter a character 9
char=9_
```

Without using predefined functions:

$$\begin{array}{r} a = 97 \\ - 32 \\ \hline \end{array}$$

$$\begin{array}{r} A = 65 \\ + 32 \\ \hline \end{array}$$

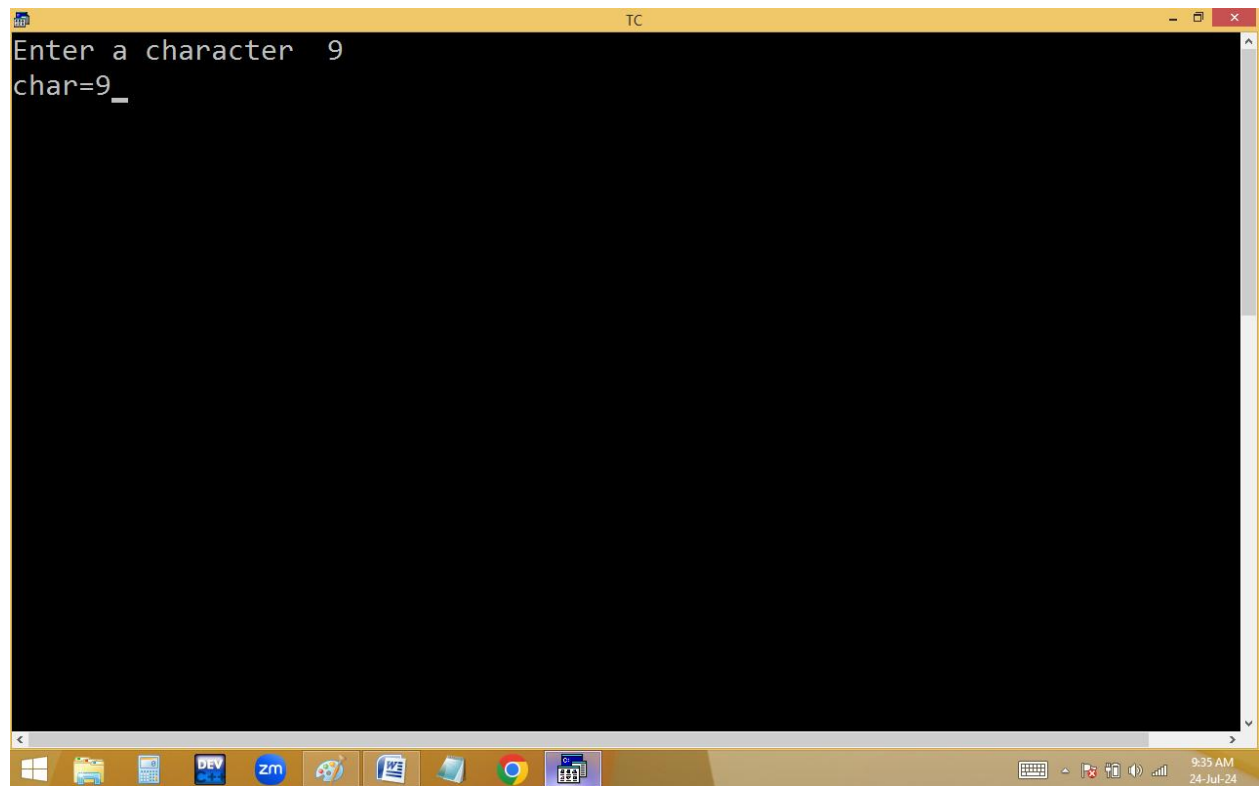
$$a = 97$$

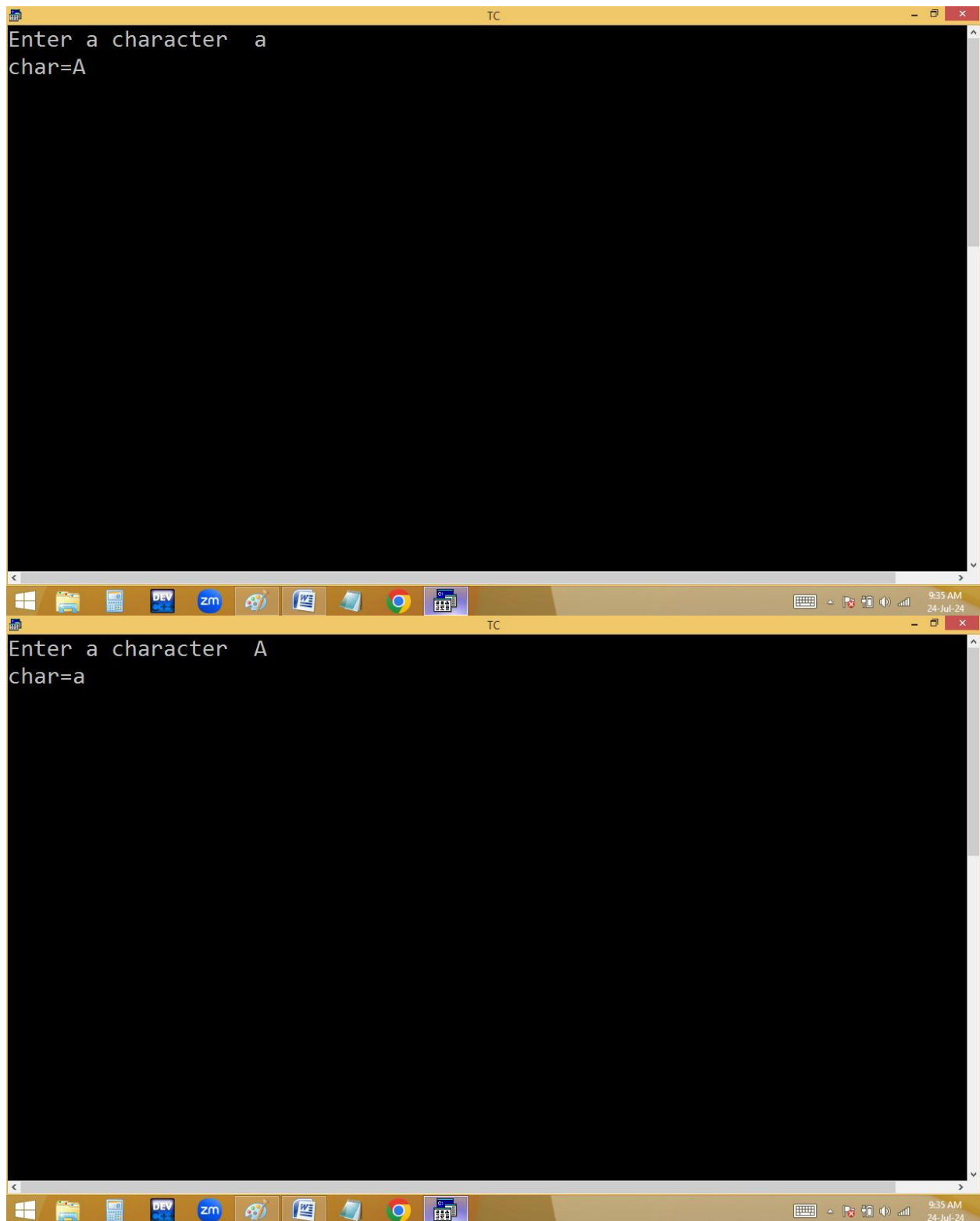


The image shows two screenshots of the Turbo C++ (TC) IDE. The top screenshot displays the source code of a C program in a blue editor window. The code includes `<stdio.h>` and `<conio.h>`, and implements a function to toggle the case of a character entered by the user. The bottom screenshot shows the same IDE with the program executed, displaying the prompt "Enter a character *" and the output "char=*_" where the underscore represents the input character.

```
TC
File Edit Run Compile Project Options Debug Break/watch
Line 9 Col 27 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
char ch;
clrscr();
printf("Enter a character "); ch=getchar();
if(ch>='a' && ch<='z')ch=ch-32;
else if(ch>='A'&&ch<='Z') _ch=ch+32;
printf("char=%c",ch);
getch();
}
```

Enter a character *
char=*_





ELECTRICITY BILL GENERATION

DOMESTIC SLAB SYSTEM

UNITS	UNIT PRICE
1-50	1.45
51-100	2.8
101-200	3.05
201-300	4.75
301-500	6
>500	6.25

30U → $30 \times 1.45 = 43.50$

80U → $50 \times 1.45 + 30 \times 2.8 = 156.5$

180U → $50 \times 1.45 + 50 \times 2.8 + 80 \times 3.05 = 456.5$

280U → $50 \times 1.45 + 50 \times 2.8 + 100 \times 3.05 + 80 \times 4.75 = 897.5$

480 → $50 \times 1.45 + 50 \times 2.8 + 100 \times 3.05 + 100 \times 4.75 + 180 \times 6 = 2072.5$

580U → $50 \times 1.45 + 50 \times 2.8 + 100 \times 3.05 + 100 \times 4.75 + 200 \times 6 + 80 \times 6.25 = 2692.5$

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

```
#include<conio.h>
```

```
void main()
```

```
{
```

```
long serno, pre, cur, units;
```

```
char name[20];
```

```
float amt;
```

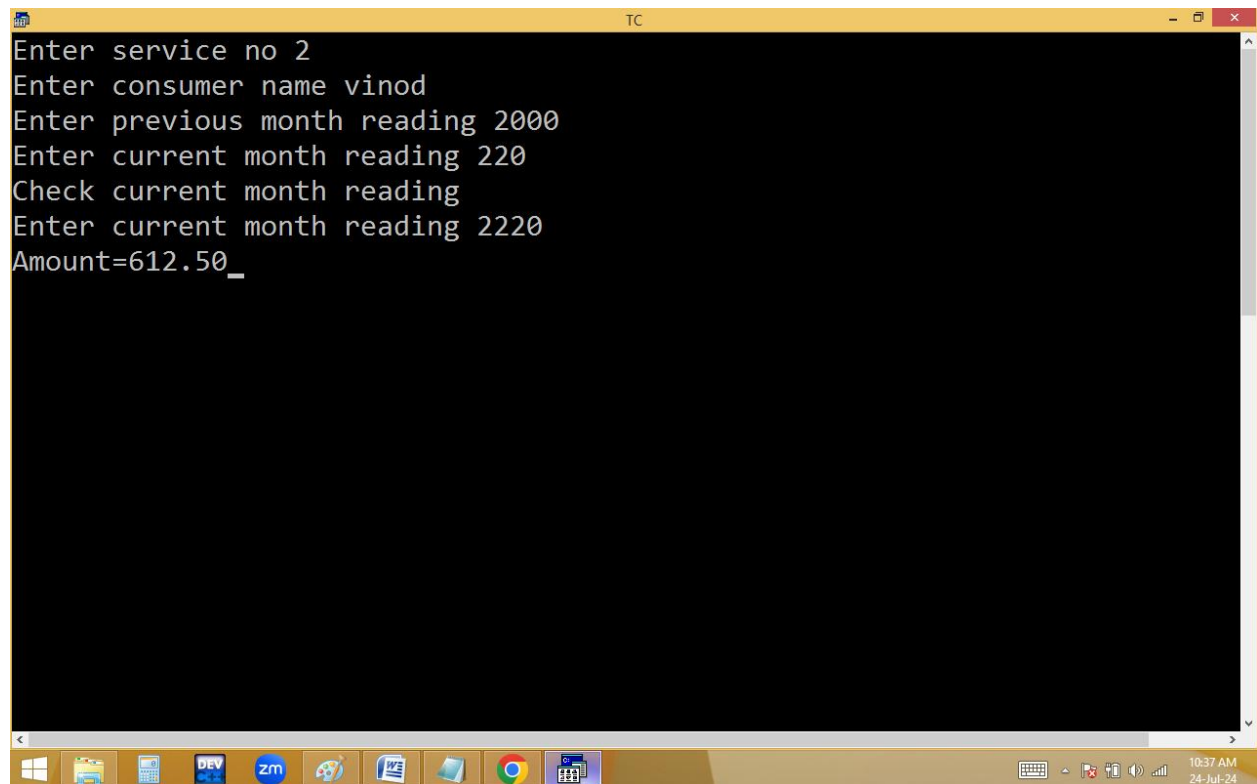
```
clrscr();
```



```
printf("Enter service no "); scanf("%ld",&serno);  
fflush(stdin);  
printf("Enter consumer name "); gets(name);  
printf("Enter previous month reading "); scanf("%ld",&pre);  
current:  
printf("Enter current month reading "); scanf("%ld",&cur);  
if(cur<pre){puts("\aCheck current month reading"); goto current;}  
units = cur - pre;  
if(units<=50) amt = units * 1.45;  
else if(units<=100) amt = 50*1.45 + (units-50)*2.8;  
else if(units<=200) amt = 50*1.45+50*2.8+(units-100)*3.05;  
else if(units<=300) amt = 50*1.45+50*2.8+100*3.05+(units-200)*4.75;  
else if(units<=500) amt = 50*1.45+50*2.8+100*3.05+100*4.75+(units-  
300)*6;  
else amt = 50*1.45+50*2.8+100*3.05+100*4.75+200*6+(units-  
500)*6.25;  
if(amt<50)amt=50;  
printf("Amount=%.2f",amt);  
getch();  
}
```

```
TC
Enter service no 3
Enter consumer name paddu
Enter previous month reading 1000
Enter current month reading 1000
Amount=50.00
```

```
TC
Enter service no 1
Enter consumer name krish
Enter previous month reading 0
Enter current month reading 580
Amount=2692.50
```



```
Enter service no 2
Enter consumer name vinod
Enter previous month reading 2000
Enter current month reading 220
Check current month reading
Enter current month reading 2220
Amount=612.50_
```

Nested if:

If within another if is called nested if.

