Printing given table?

Eg: 9^{th} table

9*1=9

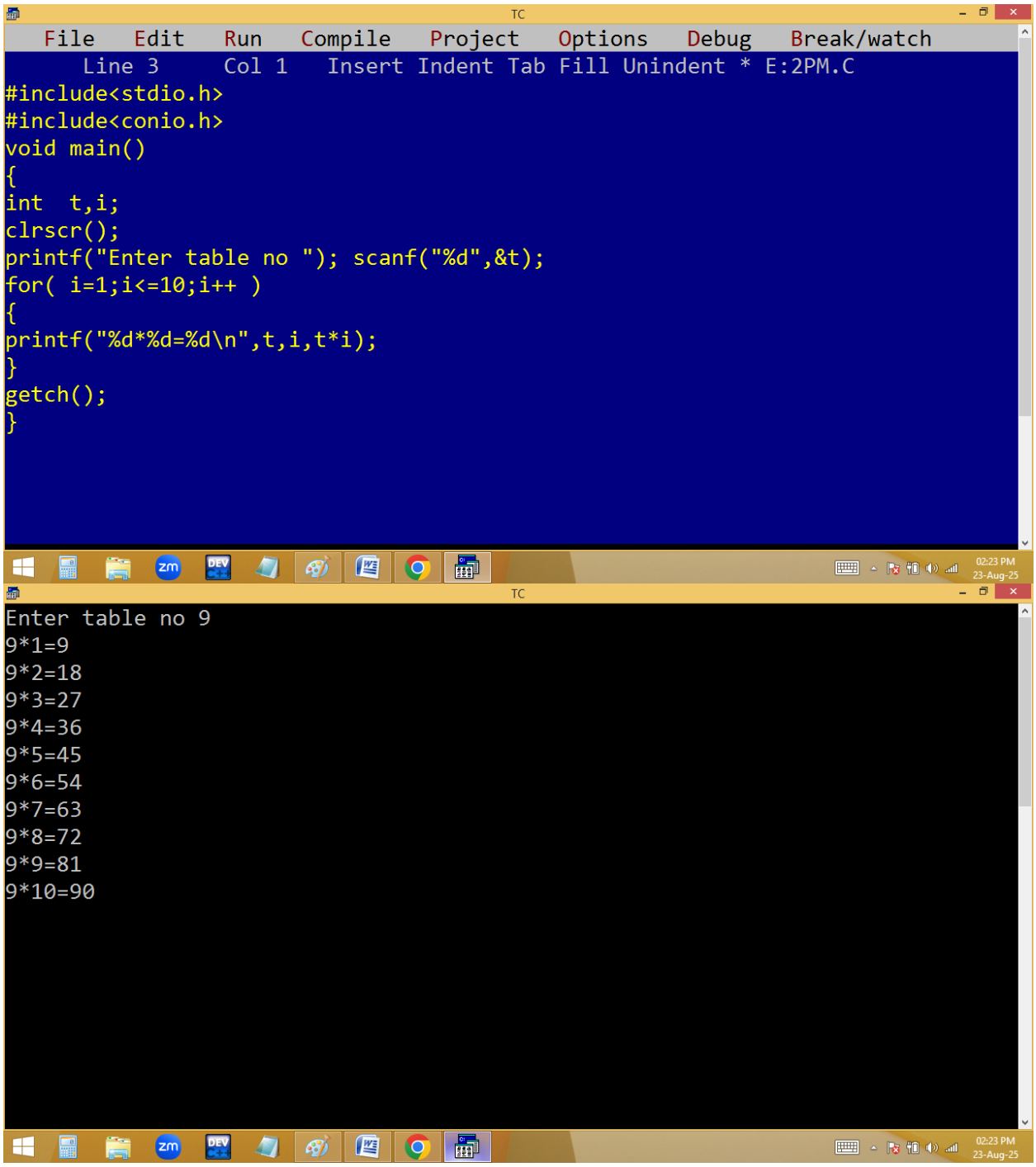
9*2=18

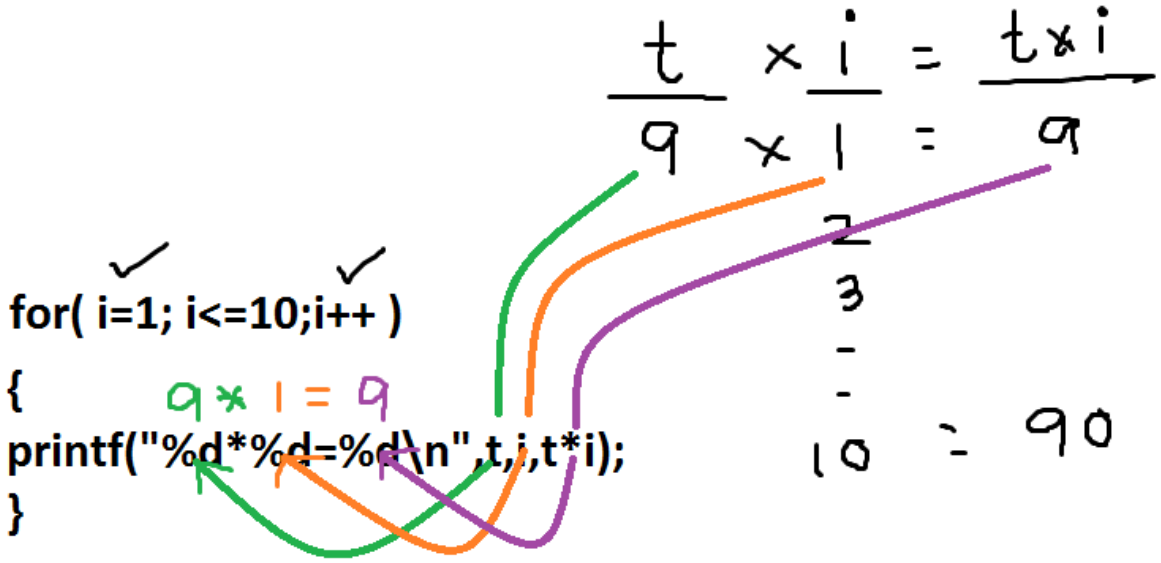
9*3=27

…

…

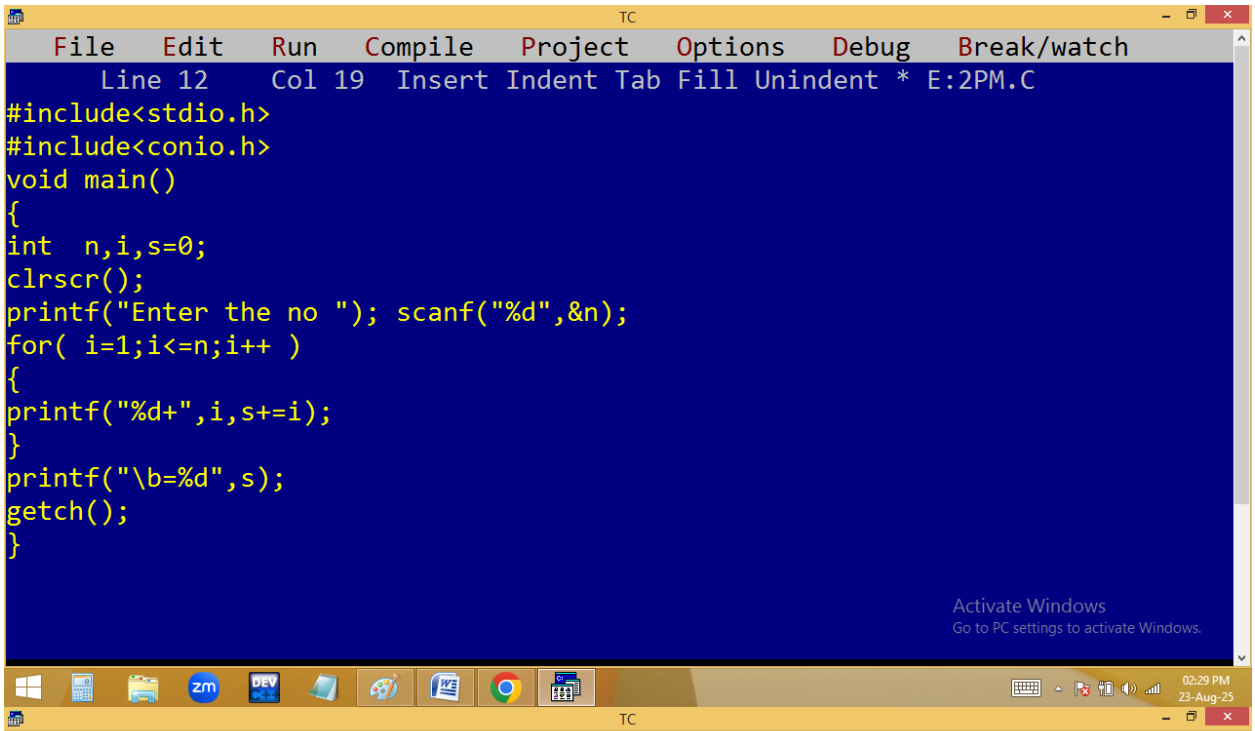
9*10=90

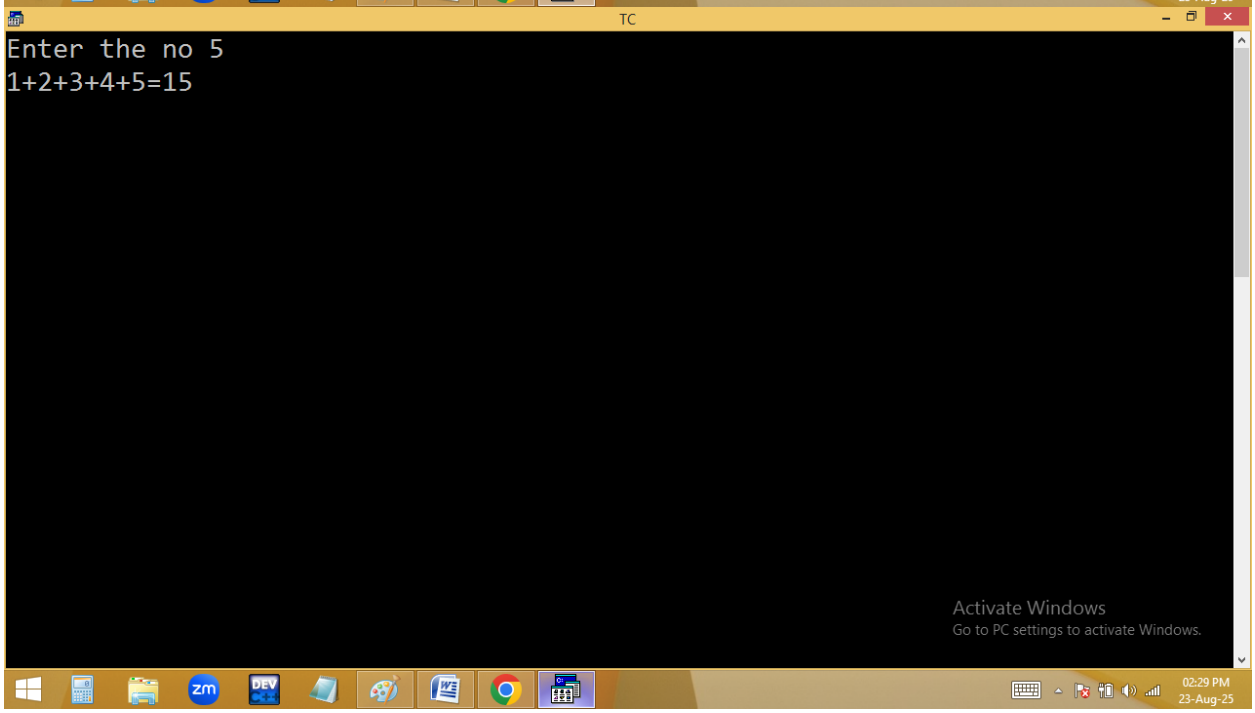

TC
File Edit Run Compile Project Options Debug Break/watch
Line 3 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int t,i;
clrscr();
printf("Enter table no "); scanf("%d",&t);
for(i=1;i<=10;i++)
{
printf("%d*%d=%d\n",t,i,t*i);
}
getch();
}
TC
Enter table no 9
9*1=9
9*2=18
9*3=27
9*4=36
9*5=45
9*6=54
9*7=63
9*8=72
9*9=81
9*10=90



Print below series?

n=5 ➔ 1+2+3+4+5=15


TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 19 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i,s=0;
clrscr();
printf("Enter the no "); scanf("%d",&n);
for(i=1;i<=n;i++)
{
printf("%d+",i,s+=i);
}
printf("\b=%d",s);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
02:29 PM
23-Aug-25


TC
Enter the no 5
1+2+3+4+5=15
Activate Windows
Go to PC settings to activate Windows.
02:29 PM
23-Aug-25

```
for( i=1; i<= 5 ;i++ )
{
printf("%d + ", i , s+=i     );
}
```

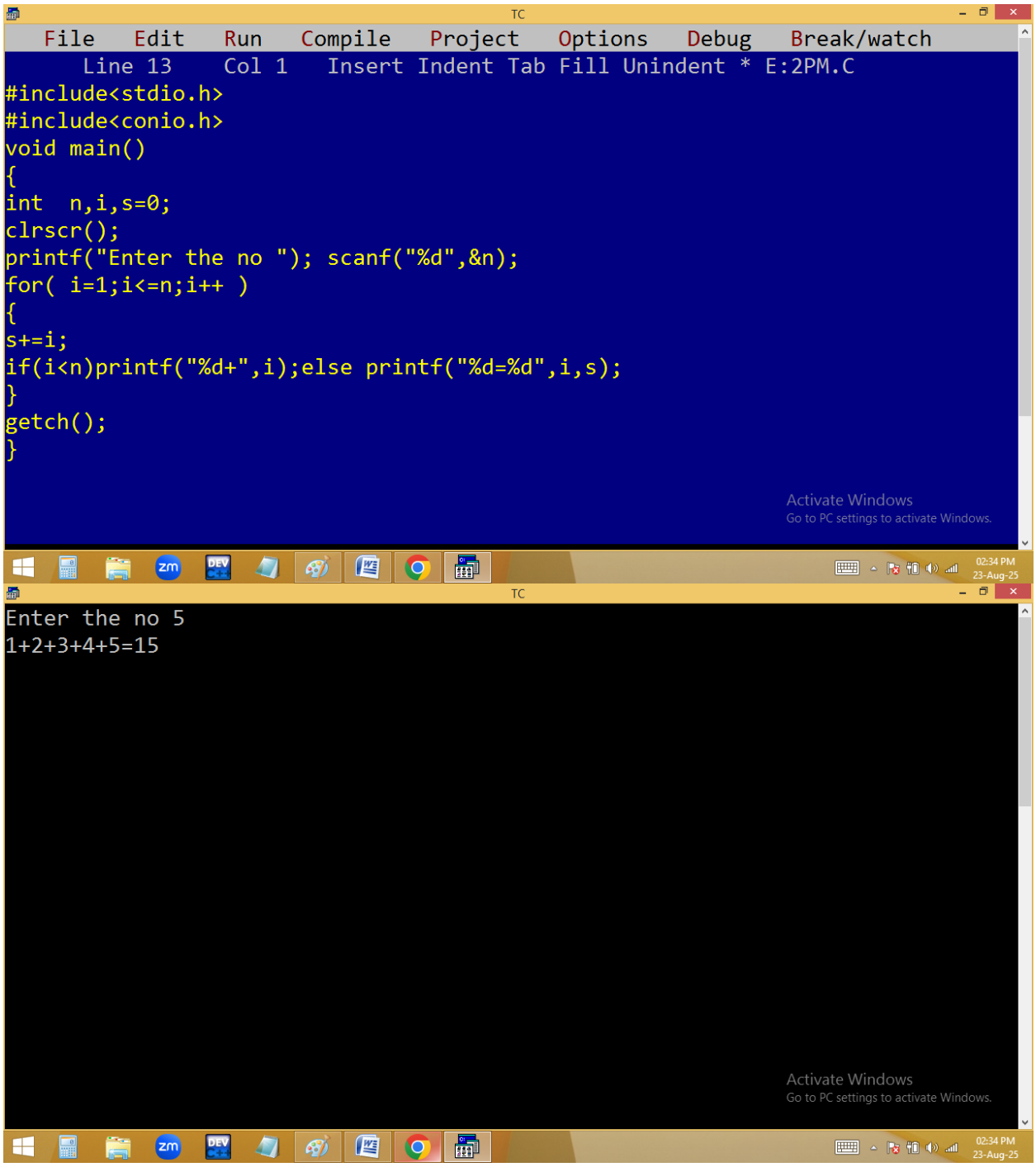
1 + 2 + 3 + 4 + 5 = 15

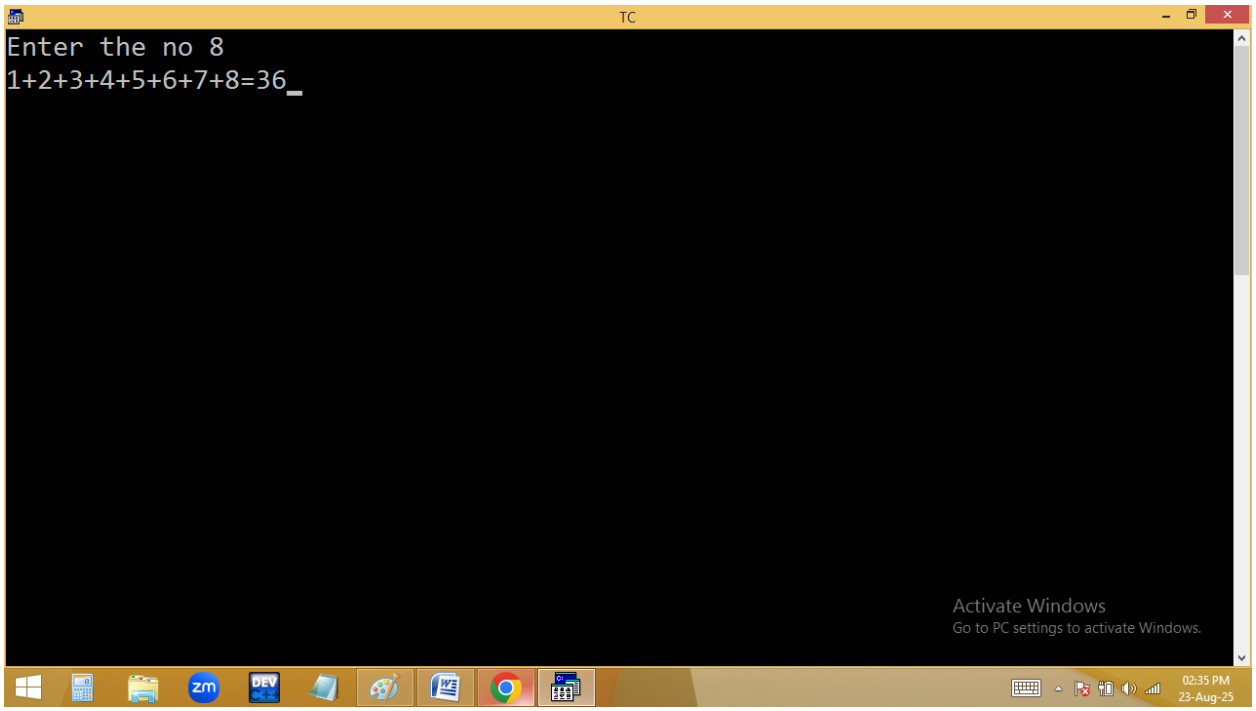
```
p("\b=%d",s);
```

i		s
1	+	0 = 1
2	+	1 = 3
3	+	3 = 6
4	+	6 = 10
5	+	10 = 15

1 +

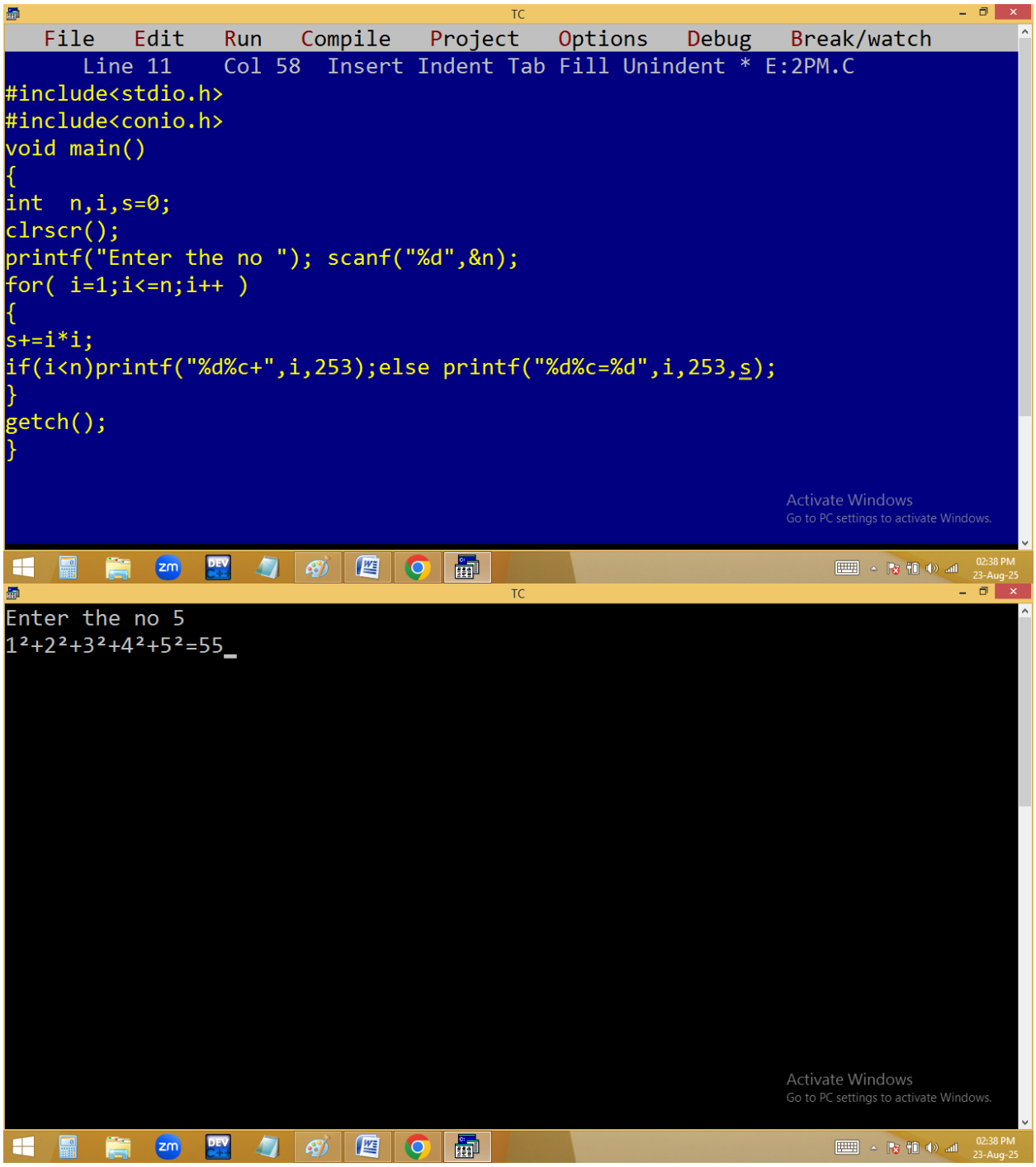
Without using \b:


TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i,s=0;
clrscr();
printf("Enter the no "); scanf("%d",&n);
for(i=1;i<=n;i++)
{
s+=i;
if(i<n)printf("%d+",i);else printf("%d=%d",i,s);
}
getch();
}
Activate Windows
Go to PC settings to activate Windows.
02:34 PM
23-Aug-25
TC
Enter the no 5
1+2+3+4+5=15
Activate Windows
Go to PC settings to activate Windows.
02:34 PM
23-Aug-25



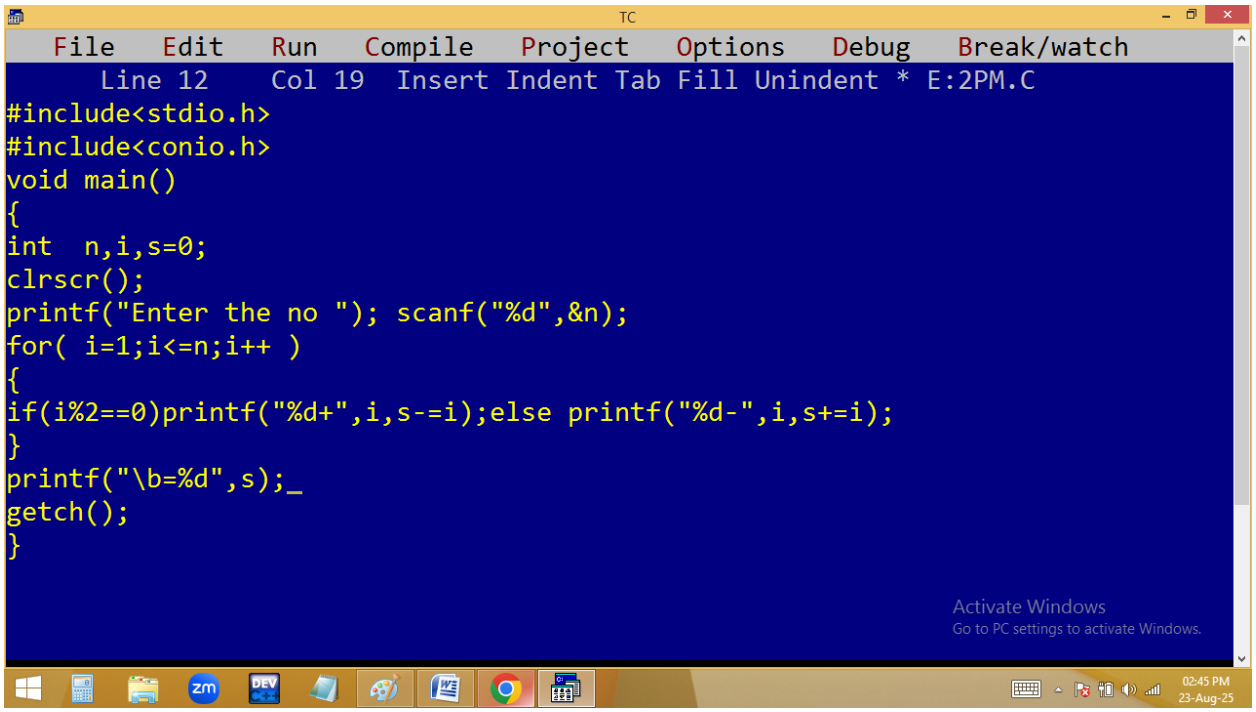
Print below series?

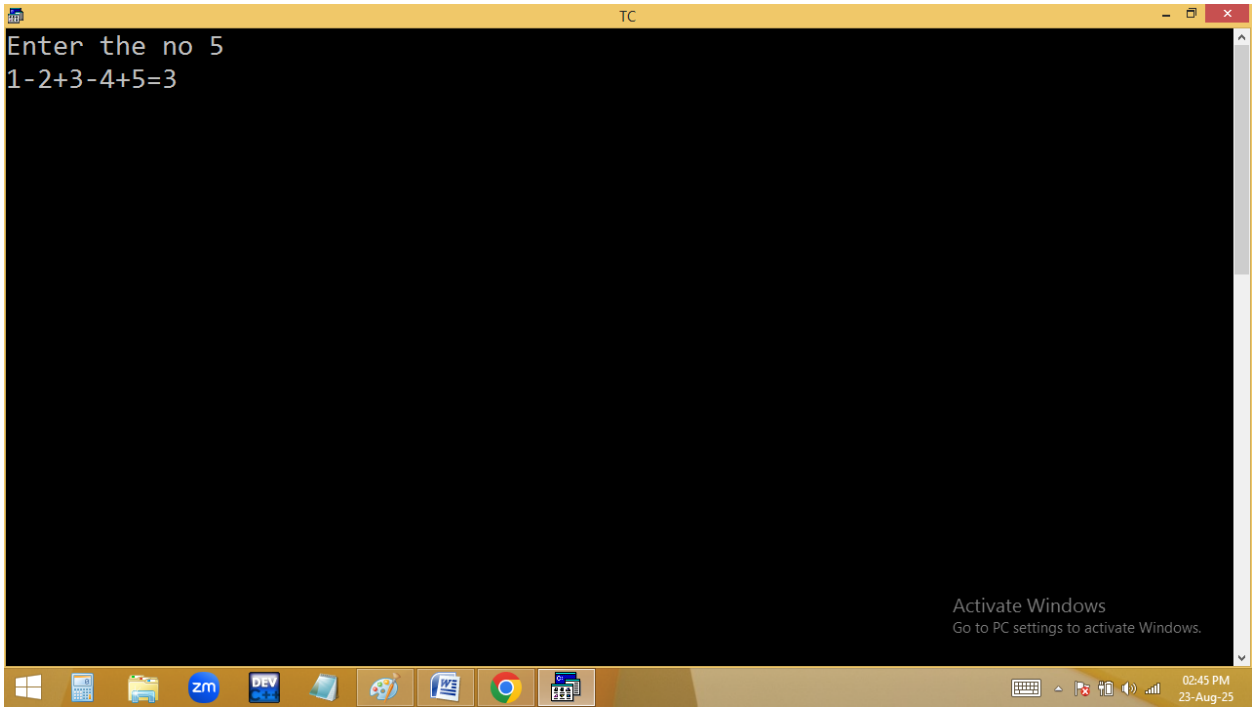
n=5 ➔ $1^2+2^2+3^2+4^2+5^2=55$

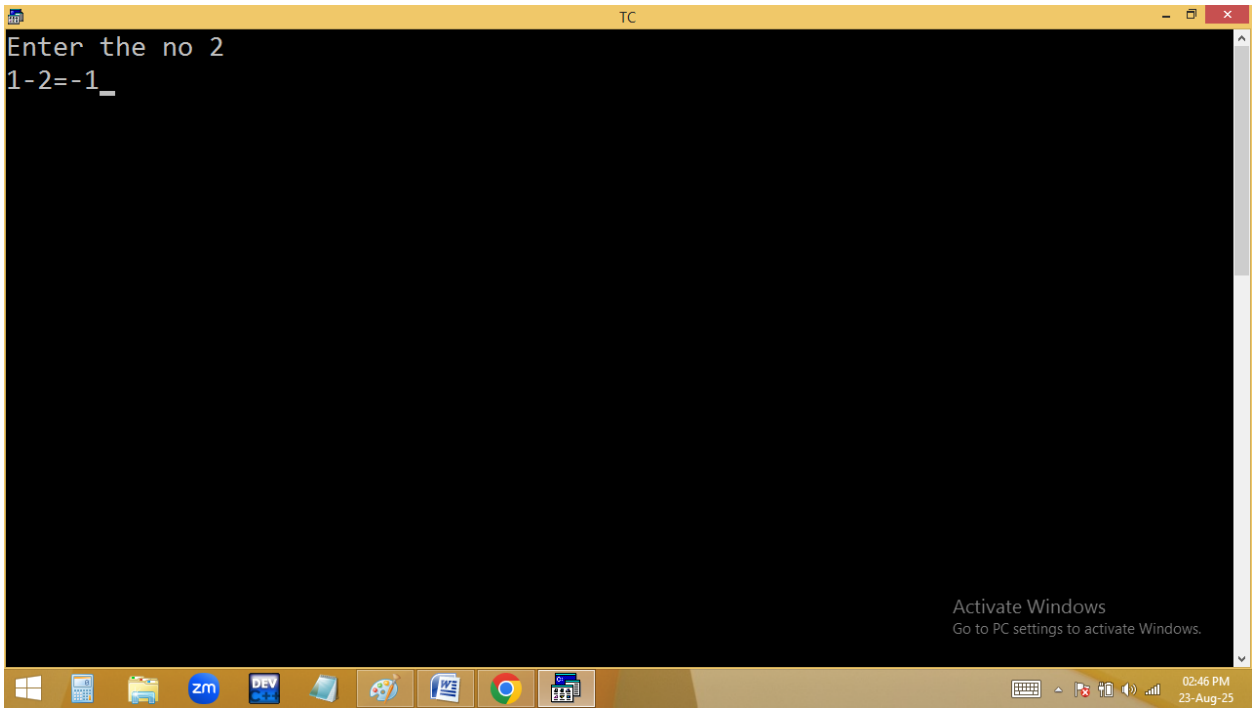

TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 58 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i,s=0;
clrscr();
printf("Enter the no "); scanf("%d",&n);
for(i=1;i<=n;i++)
{
s+=i*i;
if(i<n)printf("%d%c+",i,253);else printf("%d%c=%d",i,253,s);
}
getch();
}
Activate Windows
Go to PC settings to activate Windows.
02:38 PM
23-Aug-25
TC
Enter the no 5
1²+2²+3²+4²+5²=55
Activate Windows
Go to PC settings to activate Windows.
02:38 PM
23-Aug-25

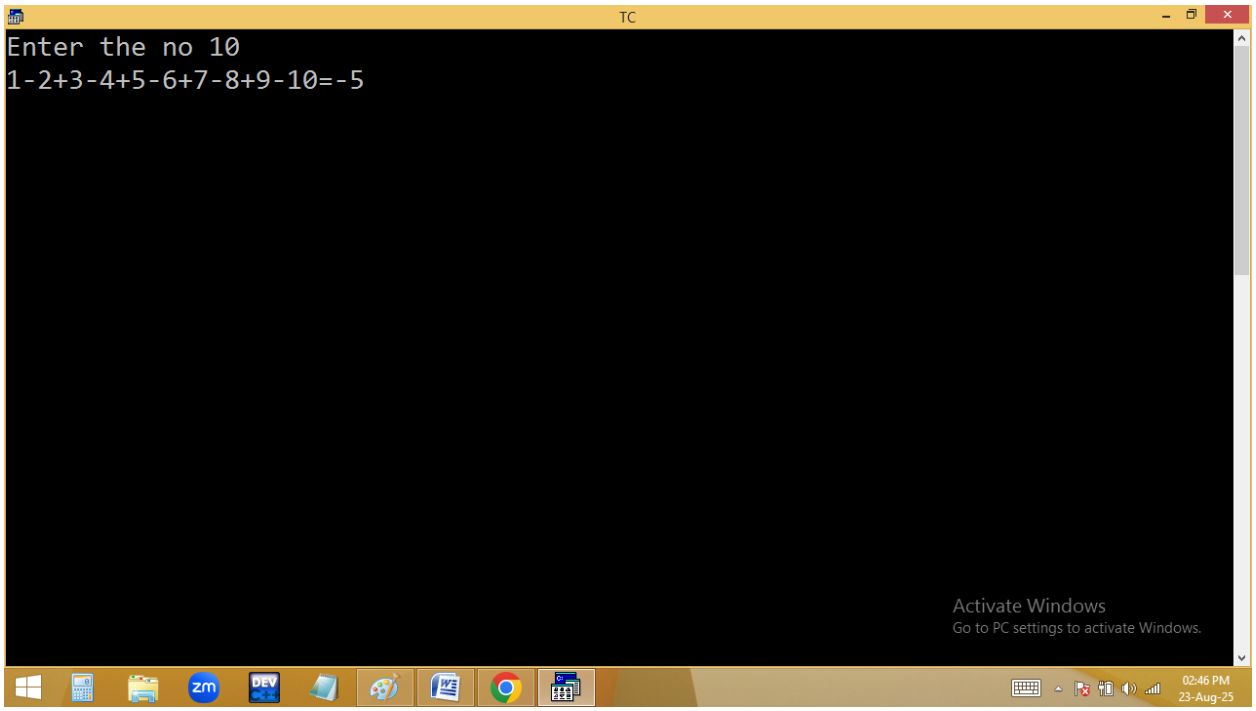
Print below series:

n=5 ➔ 1-2+3-4+5=3






TC
Enter the no 2
1-2=-1
Activate Windows
Go to PC settings to activate Windows.
02:46 PM
23-Aug-25




```
if(i%2==0) p("%d+",i,s-=i);
else  p("%d-",i,s+=i);

p(s);
```

2+4+

1-3-5-

S
0+1=1
1-2=-1
-1+3=2
2-4=-2
-2+5=3

1-2+3-4+5

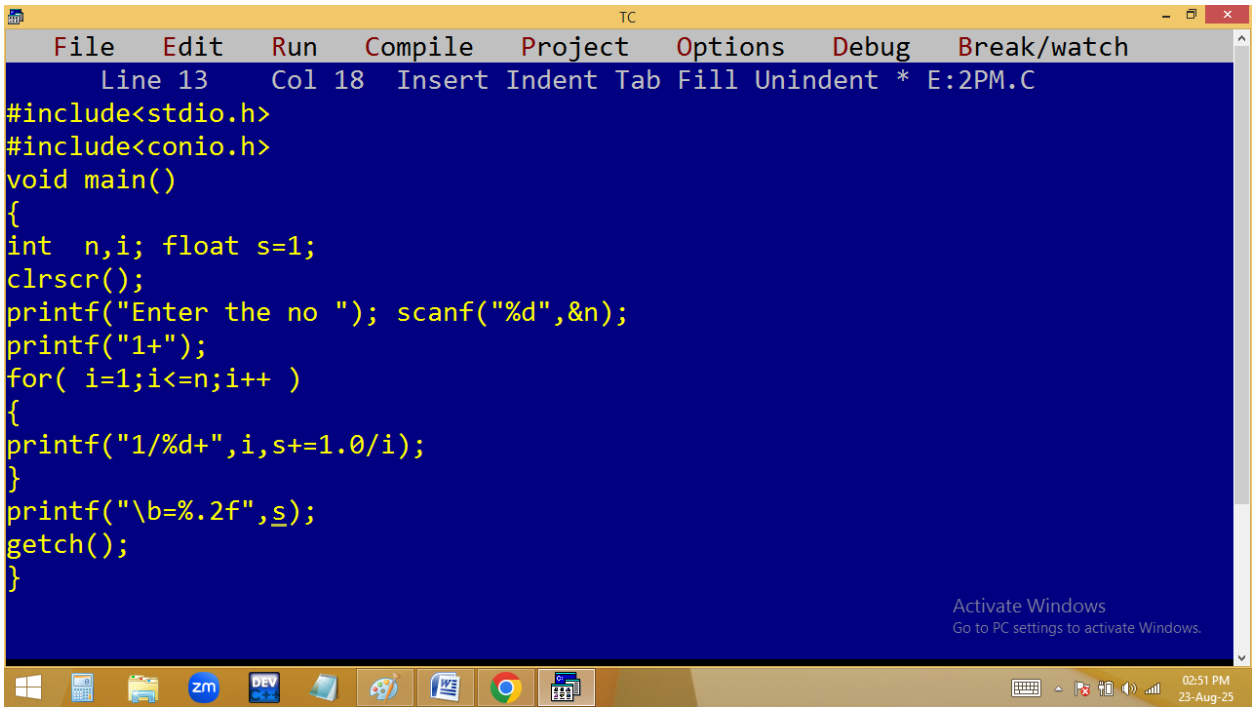
1+3+5=9

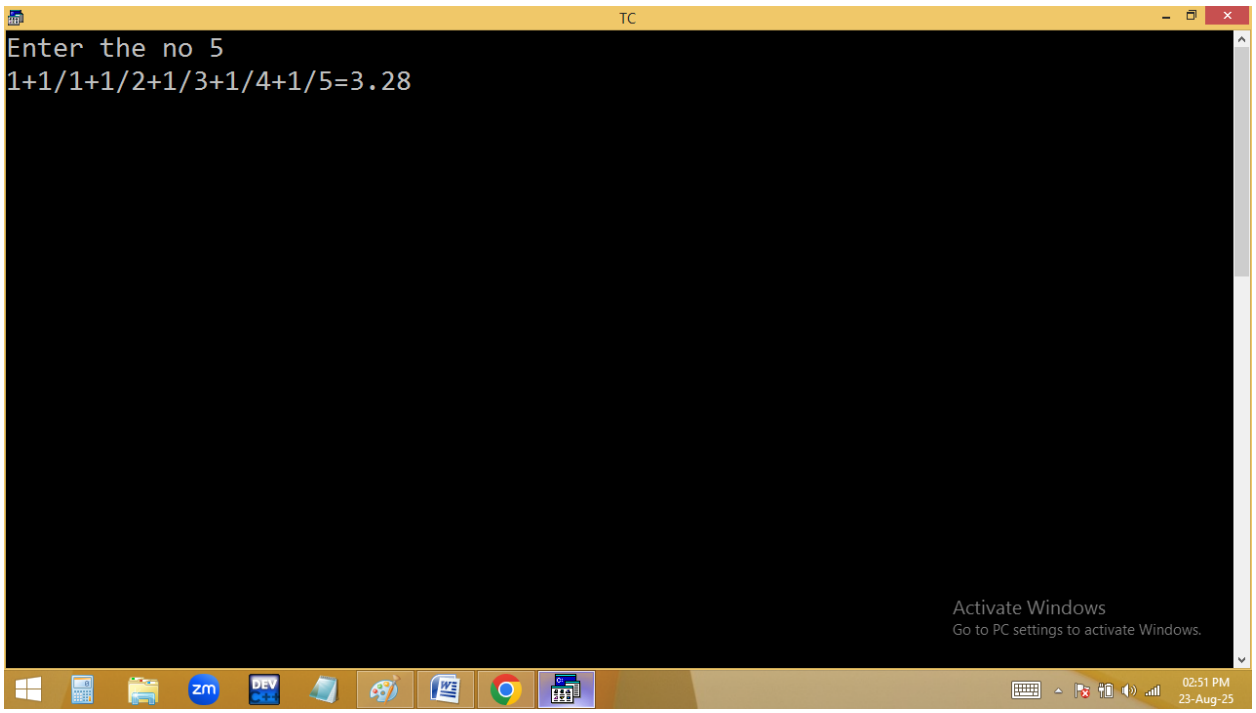
-2+-4=-6

-6/3

Print below Harmonic series:

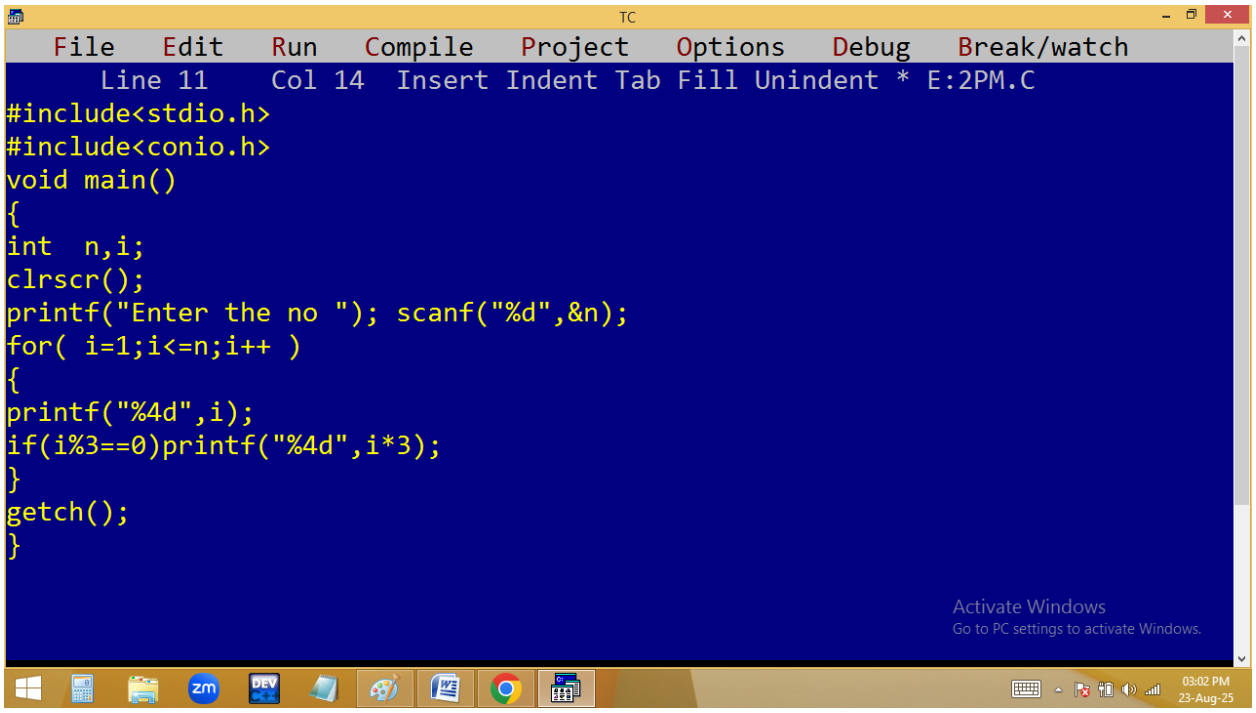
n=5 ➔ 1+1/1+1/2+1/3+1/4+1/5=3.28

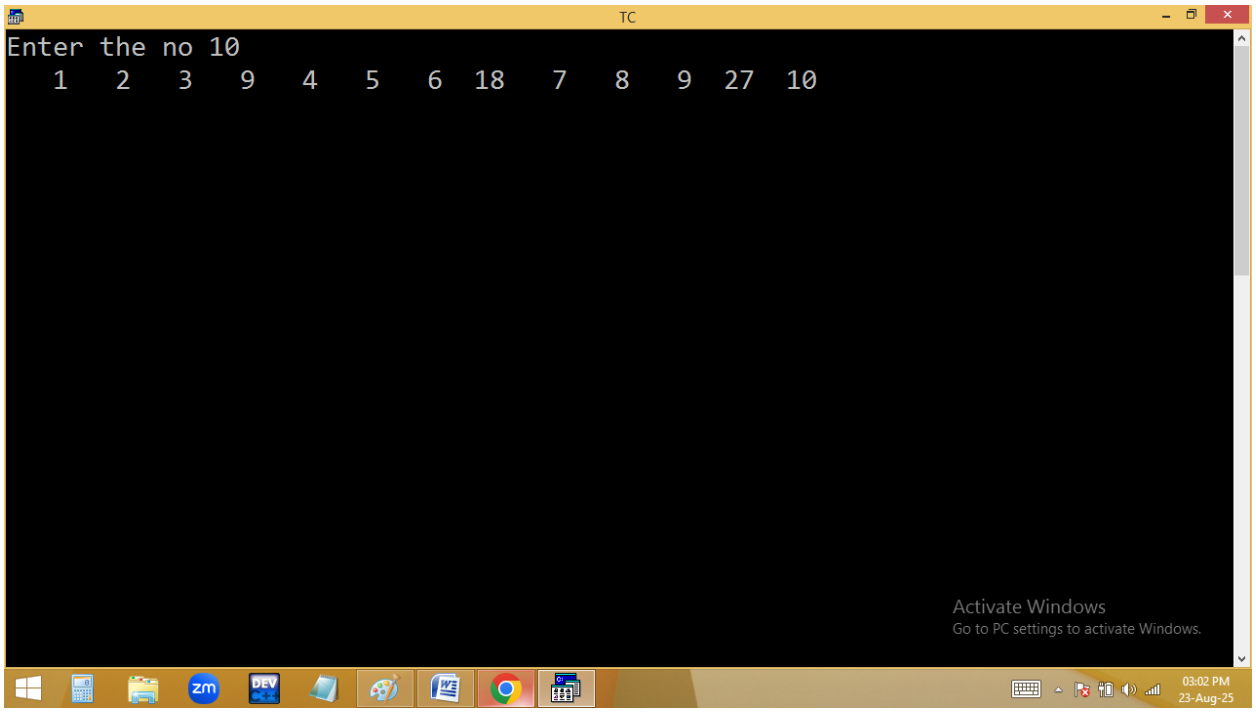

TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 18 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i; float s=1;
clrscr();
printf("Enter the no "); scanf("%d",&n);
printf("1+");
for(i=1;i<=n;i++)
{
printf("1/%d+",i,s+=1.0/i);
}
printf("\b=%.2f",s);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
02:51 PM
23-Aug-25


TC
Enter the no 5
1+1/1+1/2+1/3+1/4+1/5=3.28
Activate Windows
Go to PC settings to activate Windows.
02:51 PM
23-Aug-25

Print below series?

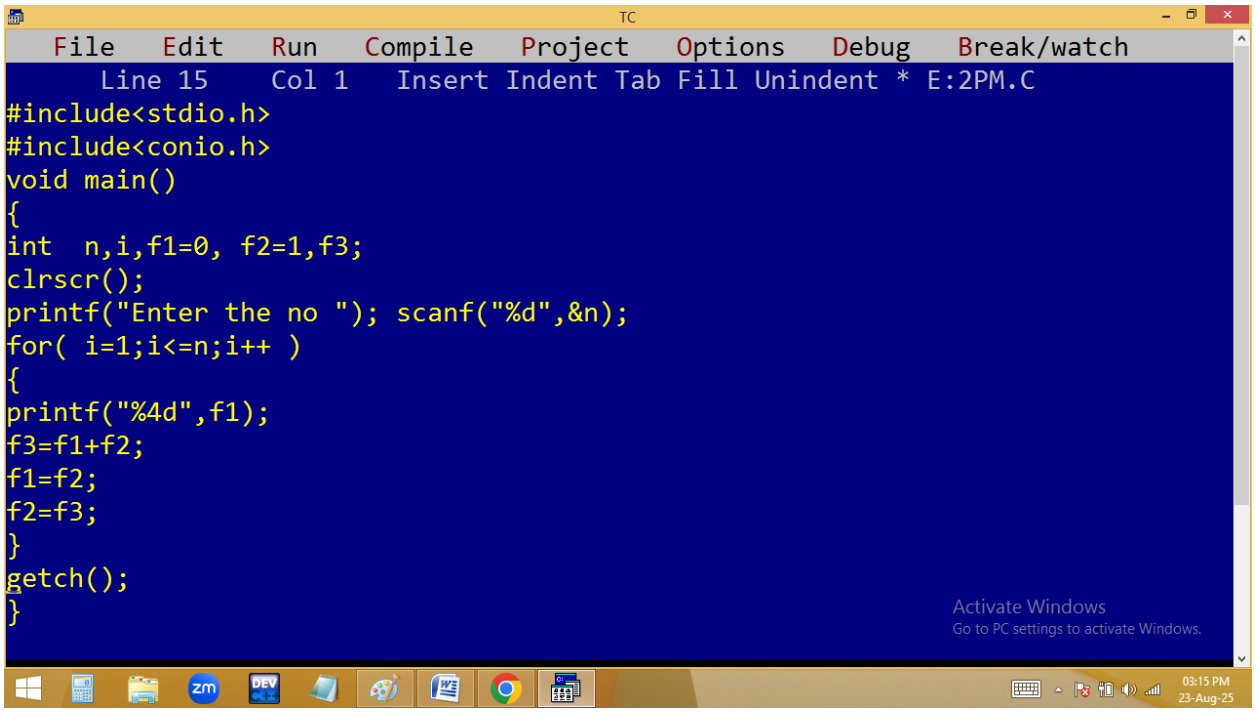
n=10 ➔ 1 2 3 9 4 5 6 18 7 8 9 27 10

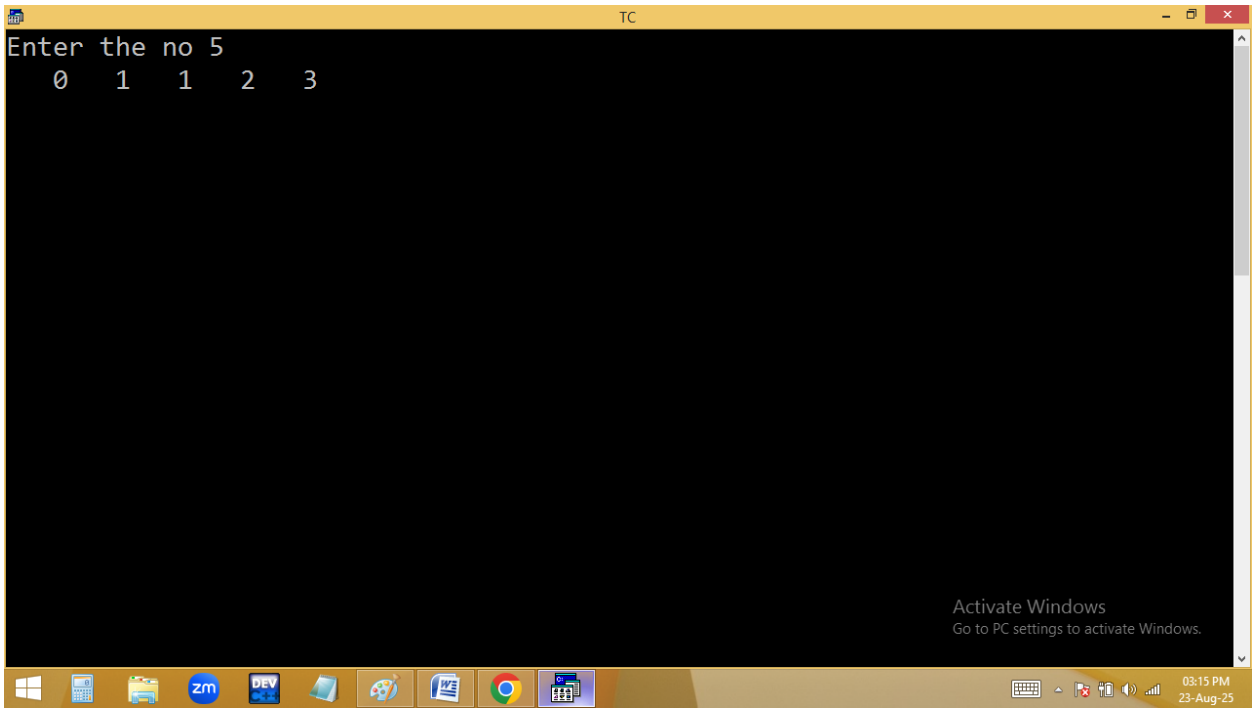


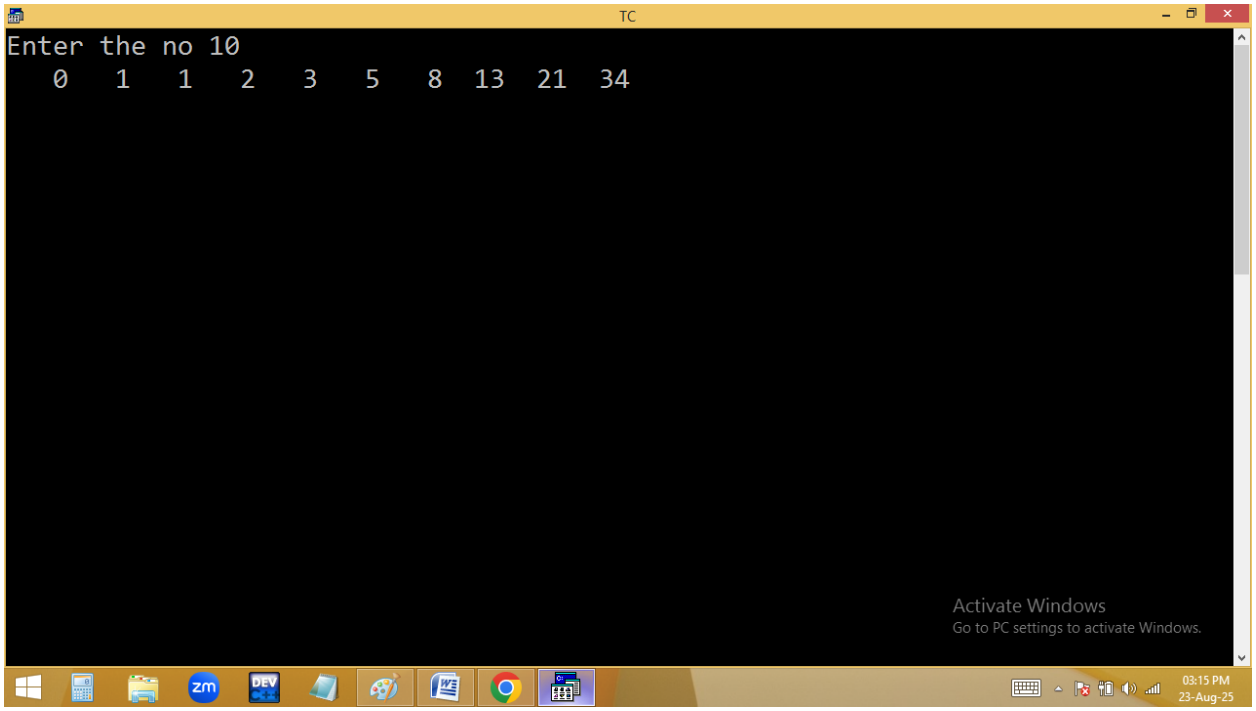


Fibonacci series:

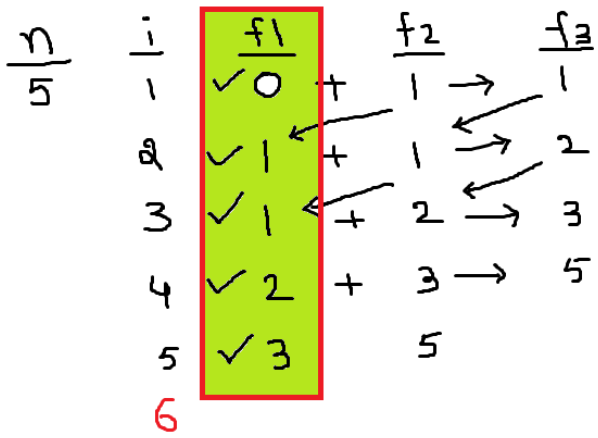
n=5 ➔ 0 1 1 2 3







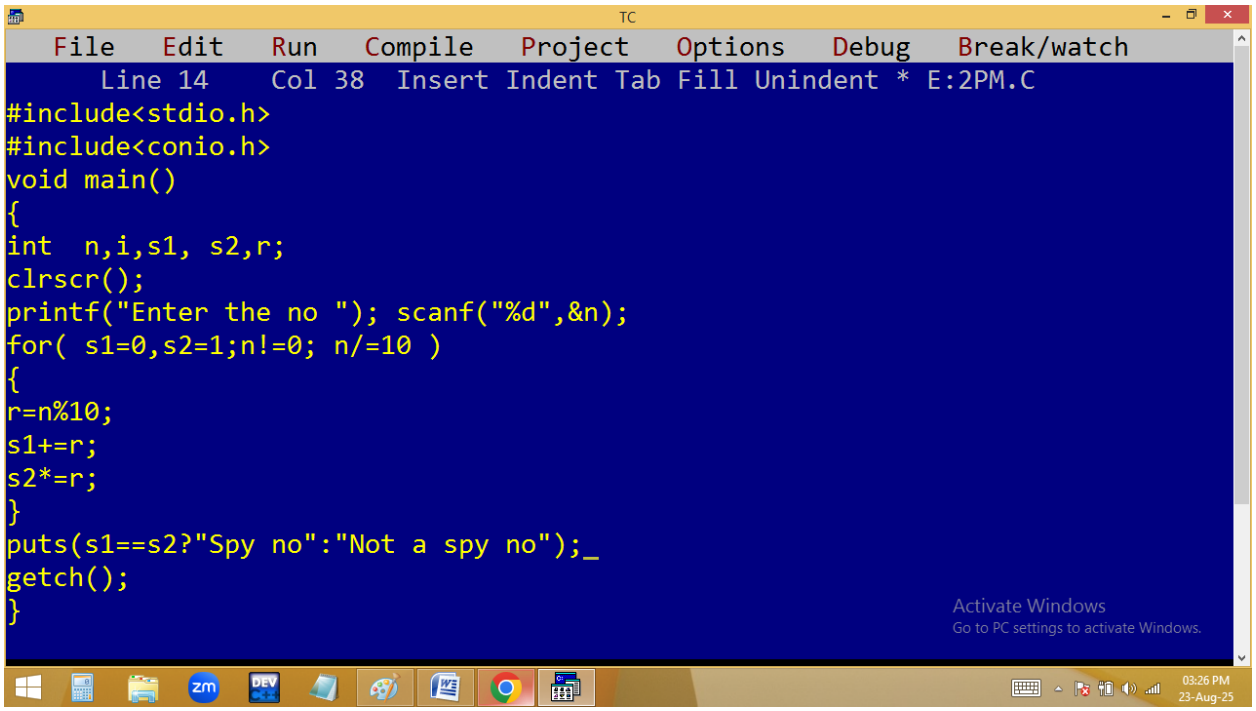

```
for(i=1;i<=n;i++)
{
p( f1 );
f3=f1+f2;
f1=f2;
f2=f3;
}
```

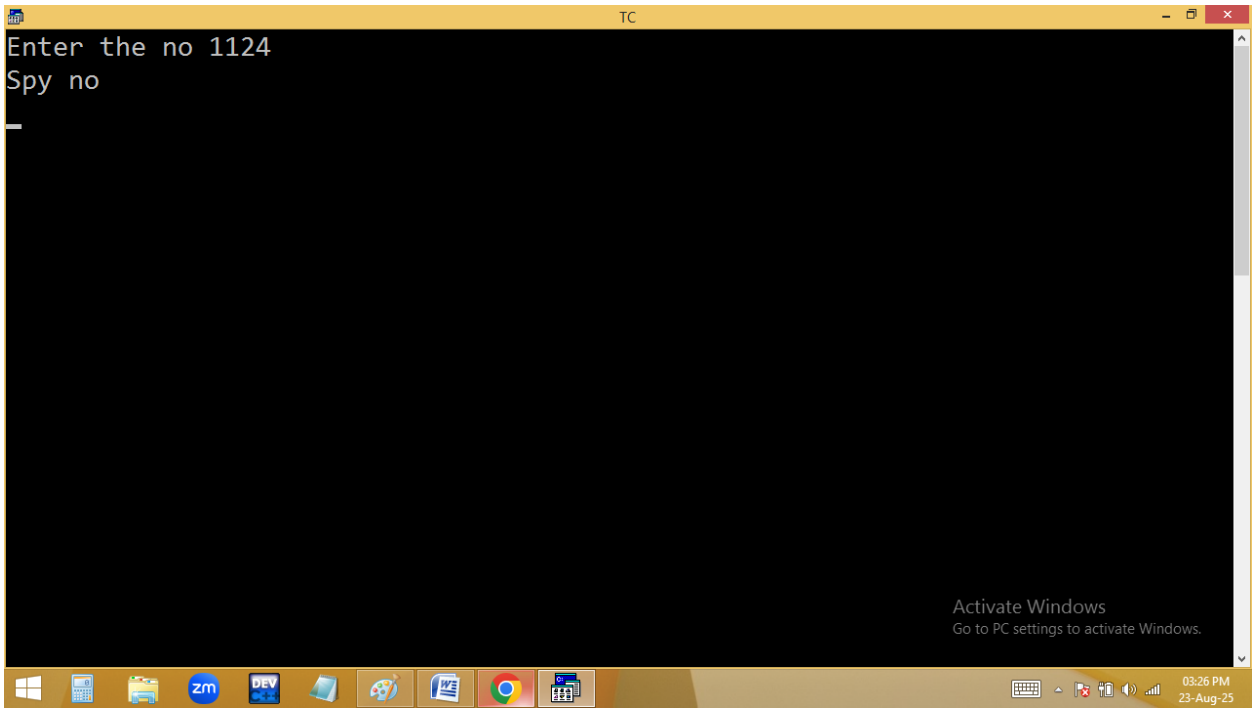


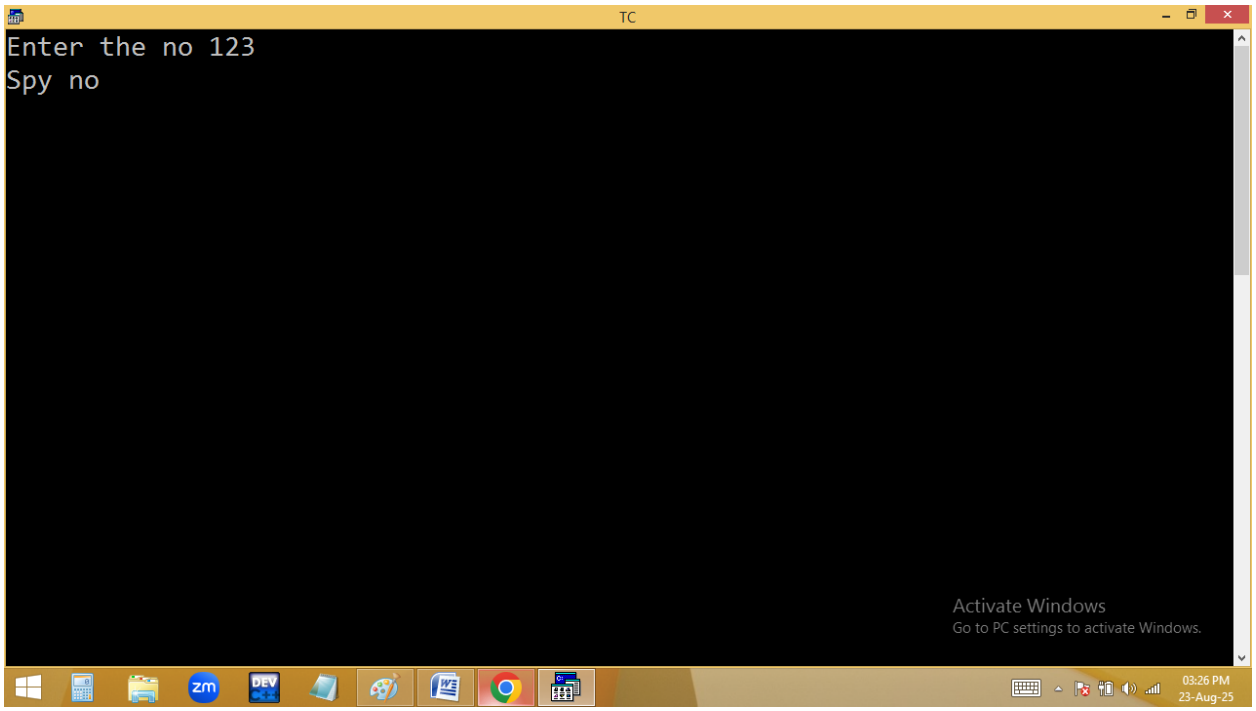
Finding spy no or not?

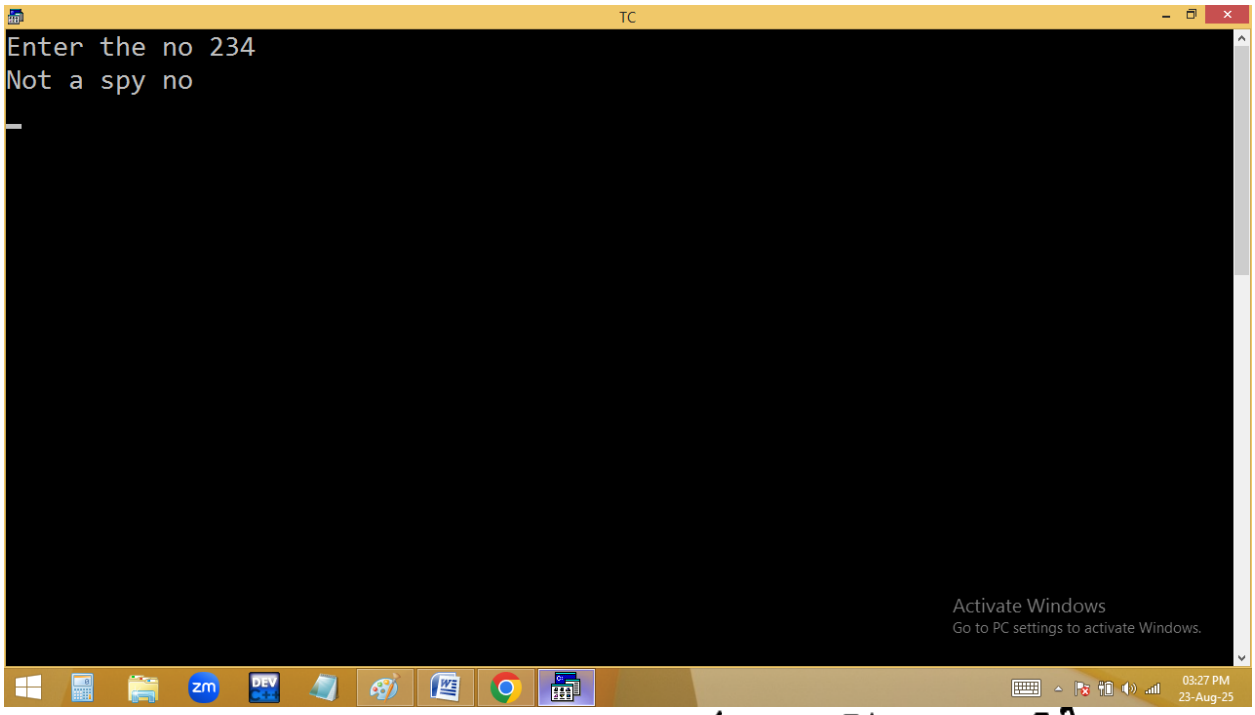
123 ➔ 1+2+3=6 or 1*2*3=6

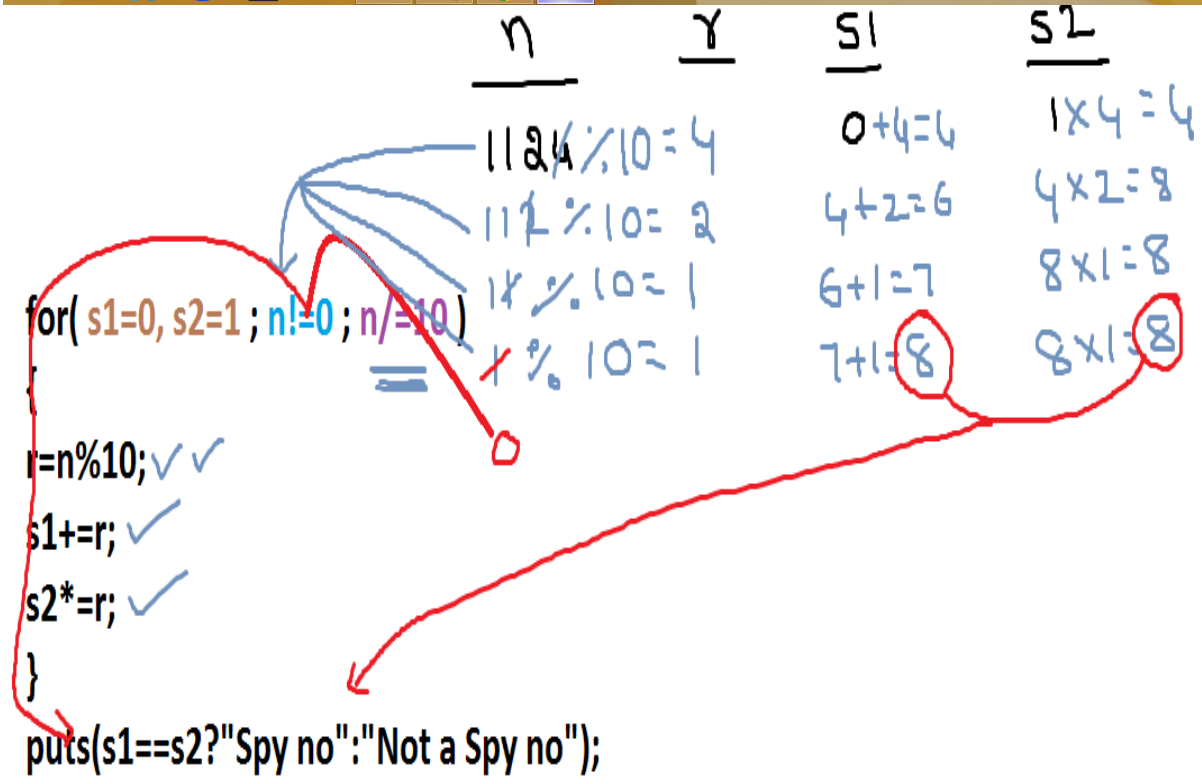
1124 ➔ 1+1+2+4=8 or 1*1*2*4=8


TC
File Edit Run Compile Project Options Debug Break/watch
Line 14 Col 38 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i,s1, s2,r;
clrscr();
printf("Enter the no "); scanf("%d",&n);
for(s1=0,s2=1;n!=0; n/=10)
{
r=n%10;
s1+=r;
s2*=r;
}
puts(s1==s2?"Spy no":"Not a spy no");_
getch();
}
Activate Windows
Go to PC settings to activate Windows.
03:26 PM
23-Aug-25


TC
Enter the no 1124
Spy no
Activate Windows
Go to PC settings to activate Windows.
03:26 PM
23-Aug-25


TC
Enter the no 123
Spy no
Activate Windows
Go to PC settings to activate Windows.
03:26 PM
23-Aug-25

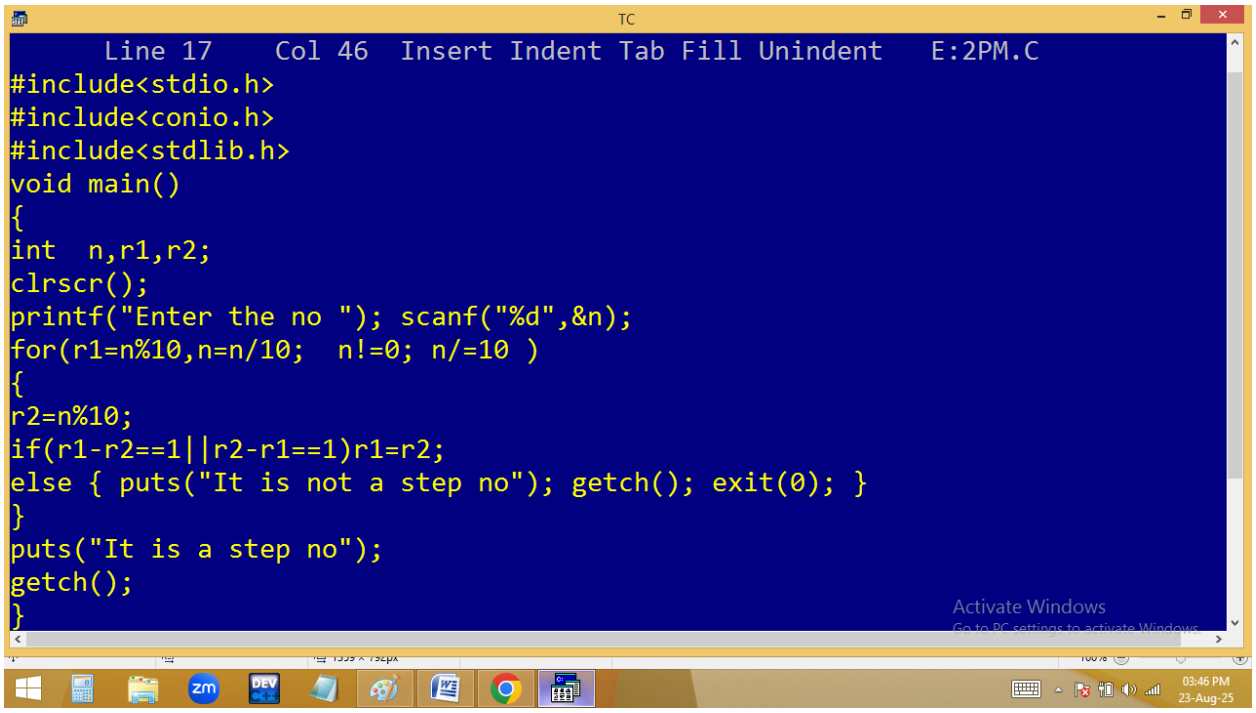

TC
Enter the no 234
Not a spy no
Activate Windows
Go to PC settings to activate Windows.
03:27 PM
23-Aug-25

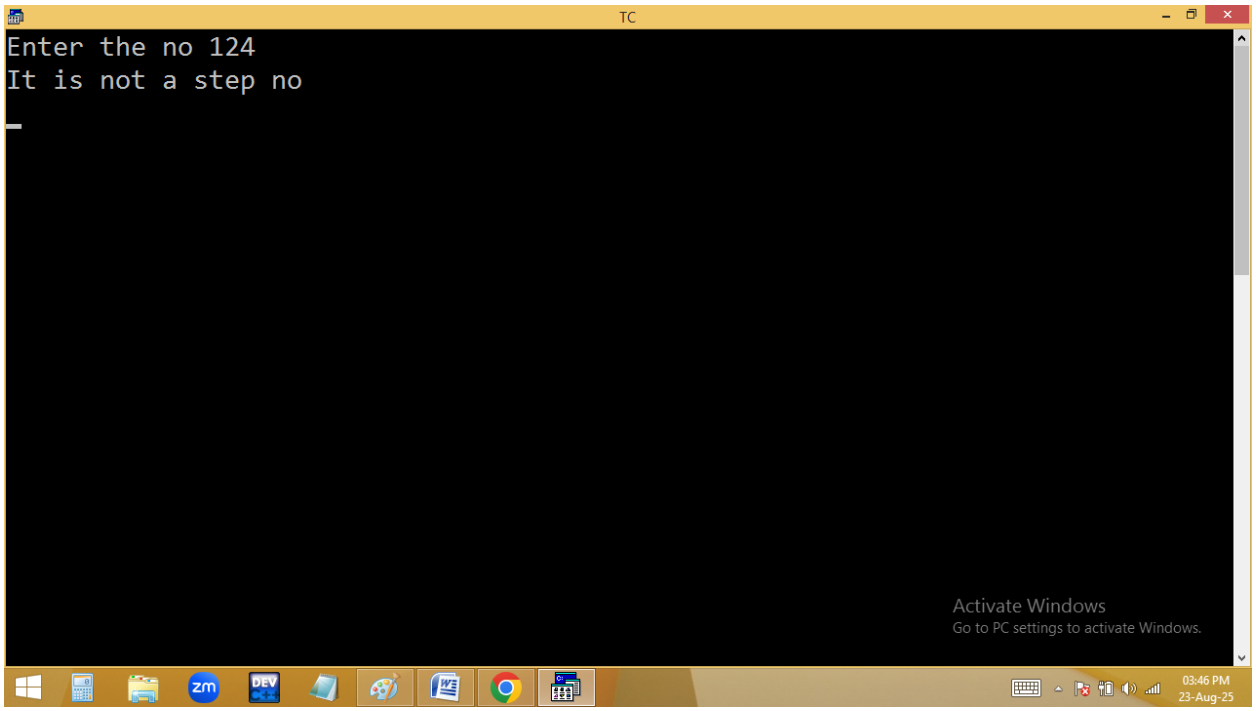

n
r
s1
s2
1234 %10 = 4
123 %10 = 3
12 %10 = 2
1 %10 = 1
0+4=4
4+3=7
7+2=9
9+1=10
1x4=4
4x3=12
12x2=24
24x1=24
for(s1=0, s2=1 ; n!=0 ; n/=10)
{
r=n%10;
s1+=r;
s2*=r;
}
puts(s1==s2?"Spy no":"Not a Spy no");

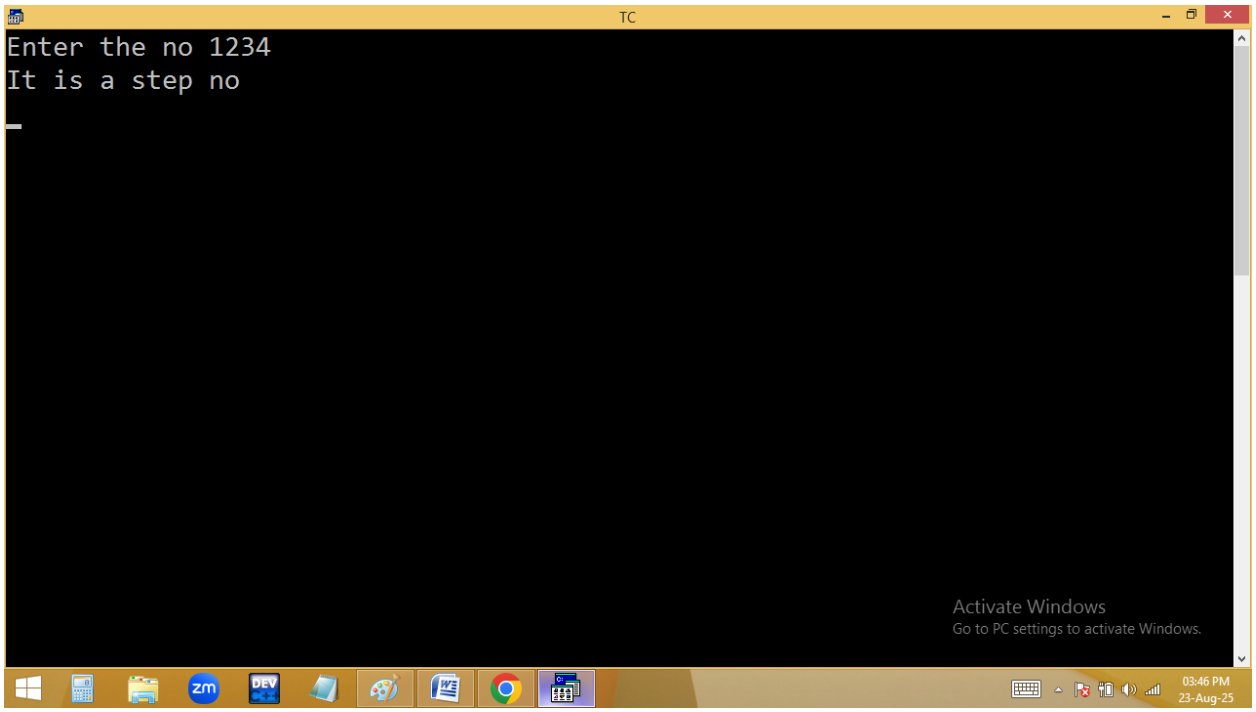
Finding step no or not?

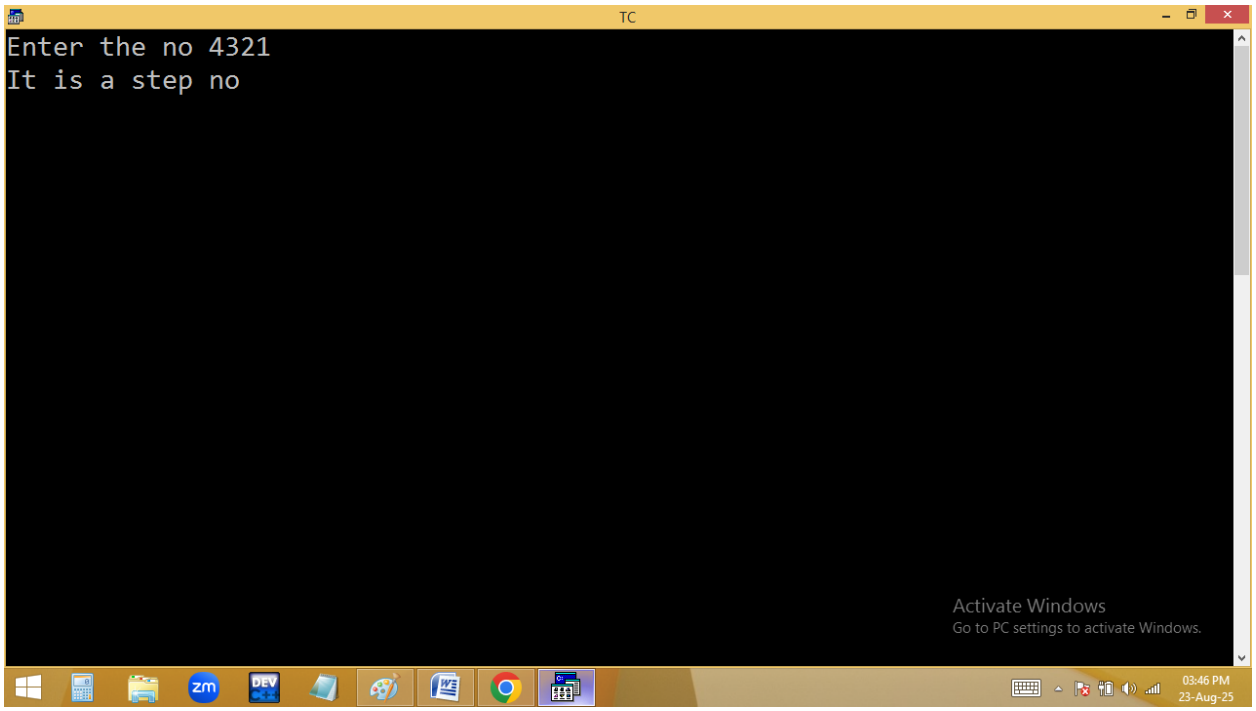
1234 , 4321, 5678,…

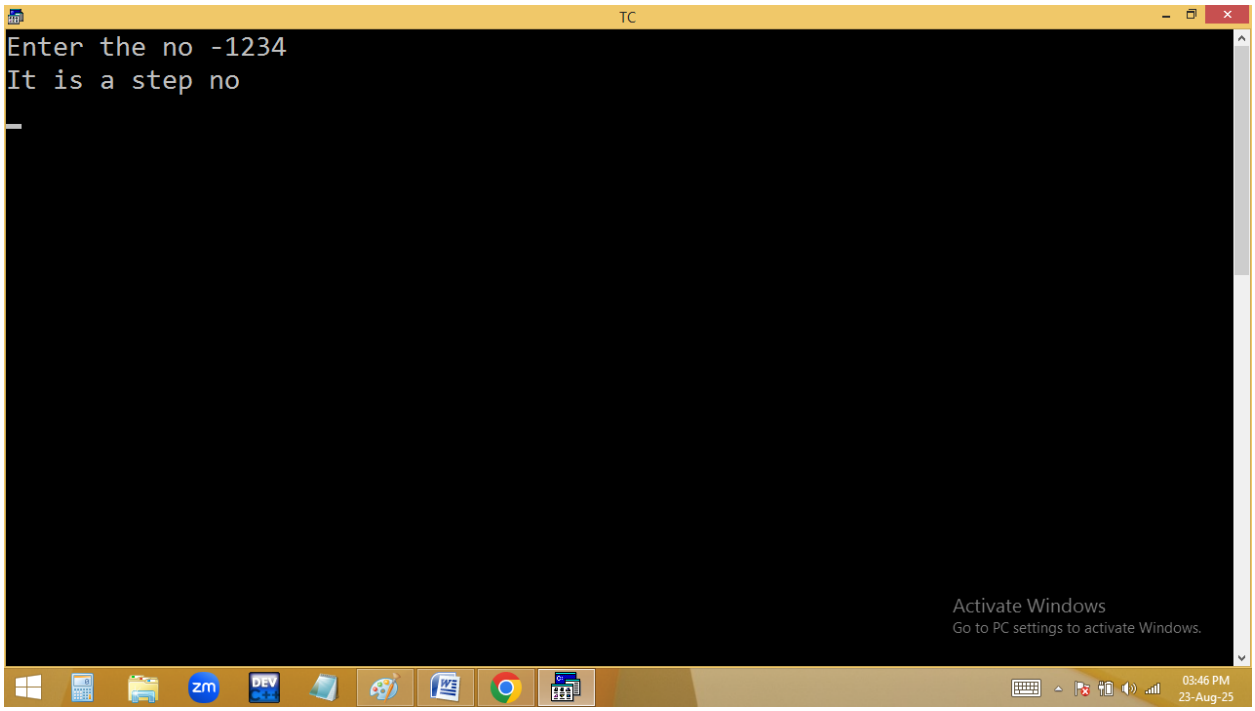
5677 ← not a step no




TC
Enter the no 124
It is not a step no
Activate Windows
Go to PC settings to activate Windows.
03:46 PM
23-Aug-25


TC
Enter the no 1234
It is a step no
Activate Windows
Go to PC settings to activate Windows.
03:46 PM
23-Aug-25


TC
Enter the no 4321
It is a step no
Activate Windows
Go to PC settings to activate Windows.
03:46 PM
23-Aug-25




```
for( r1 = n%10 , n/=10 ; n !=0 ;n/=10)
{
r2=n%10;
if( r1-r2==1 || r2-r1==1) r1=r2;
else {p("Not a step no");getch(); exit(0);}
}
p("Step no");
```

Home work:

Find perfect no or not? Sum of factors is equal to given no

Eg: 6, 28 are perfect no's

6 factors are 1+2+3=**6**

28 factors are 1+2+4+7+14=**28**

Find prime no or not? No having 2 factors or divisible with 1 and itself only.

2 divisible with 1 and 2 only ← prime

3 divisible with 1 and 3 only ← prime

4 divisible with 1, 2, 4 only ← composite no