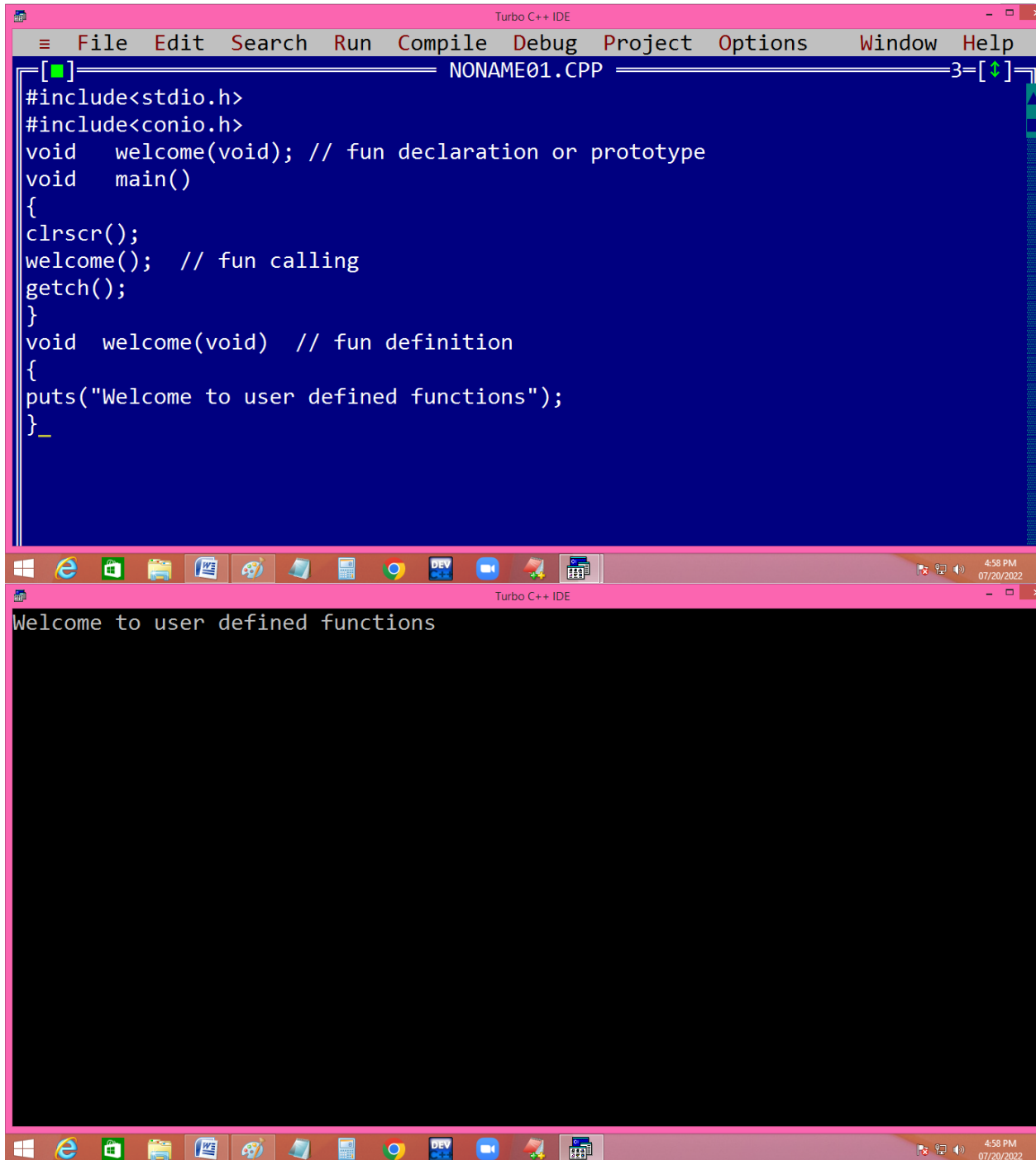


Function without arguments, without return value.



The screenshot displays the Turbo C++ IDE interface. The top window, titled 'NONAME01.CPP', contains the following C++ code:

```
#include<stdio.h>
#include<conio.h>
void  welcome(void); // fun declaration or prototype
void  main()
{
  clrscr();
  welcome(); // fun calling
  getch();
}
void  welcome(void) // fun definition
{
  puts("Welcome to user defined functions");
}
_
```

The bottom window shows the output of the program, which is 'Welcome to user defined functions'. The Windows taskbar at the bottom indicates the system time as 4:58 PM on 07/20/2022.

Turbo C++ IDE

File Edit Search Run Compile Debug Project Options Window Help

NONAME01.CPP

```
#include<stdio.h>
#include<conio.h>
void  welcome(void); // fun declaration or prototype
void  main()
{
clrscr();
welcome(); // fun calling
getch();
}
void  welcome() // fun definition
{
puts("Welcome to user defined functions");
}
```

Turbo C++ IDE

File Edit Search Run Compile Debug Project Options Window Help

NONAME01.CPP

```
#include<stdio.h>
#include<conio.h>
void  welcome(); // fun declaration or prototype
void  main()
{
clrscr();
welcome(); // fun calling
getch();
}
void  welcome() // fun definition
{
puts("Welcome to user defined functions");
}
```

The image shows a screenshot of the Turbo C++ IDE. The top window, titled 'NONAME01.CPP', contains the following C++ code:

```
#include<stdio.h>
#include<conio.h>
void    sum(); // fun declaration or prototype
void    main()
{
    clrscr();
    sum(); // fun calling
    getch();
}
void    sum() // fun definition
{
    int a=10,b=20;
    printf("Sum=%d",a+b);
}
```

The bottom window shows the output of the program: 'Sum=30'. The Windows taskbar at the bottom indicates the time is 5:01 PM on 07/20/2022.

Function with arguments, with return value.

```
Turbo C++ IDE
NONAME02.CPP
4

#include<stdio.h>
#include<conio.h>
int evenodd(int); // fun declaration
int evenodd(int f) // f is formal parameter - fun definition
{
return f%2;
}
void main()
{
int a;
clrscr();
printf("Enter a no "); scanf("%d",&a);
int x = evenodd(a); // a is actual parameter - fun calling
if(x==0)puts("Even"); else puts("Odd");
if(evenodd(a)==0)puts("Even"); else puts("Odd");
puts(evenodd(a)?"Odd":"Even");
getch();
}

Even
Even
Even
_
```

```
Turbo C++ IDE
Enter a no 3
Odd
Odd
Odd
_
```

```
int evenodd(int); // fun declaration
int evenodd(int f) // f is formal parameter - fun definition
{ 3%2=1 4%2=0
  return f%2;
}
void main()
{
  int a;
  clrscr();
  printf("Enter a no "); scanf("%d",&a);
  int x = evenodd(a); // a is actual parameter - fun calling
  if(x==0)puts("Even"); else puts("Odd");
  if(evenodd(a)==0)puts("Even"); else puts("Odd");
  puts(evenodd(a)?"Odd":"Even");
  getch();
}
```

The image shows a screenshot of the Turbo C++ IDE. The top window displays the source code for a file named NONAME02.CPP. The code includes headers for stdio.h and conio.h, declares a sum function, defines it, and uses it in a main function. The bottom window shows the program's execution output.

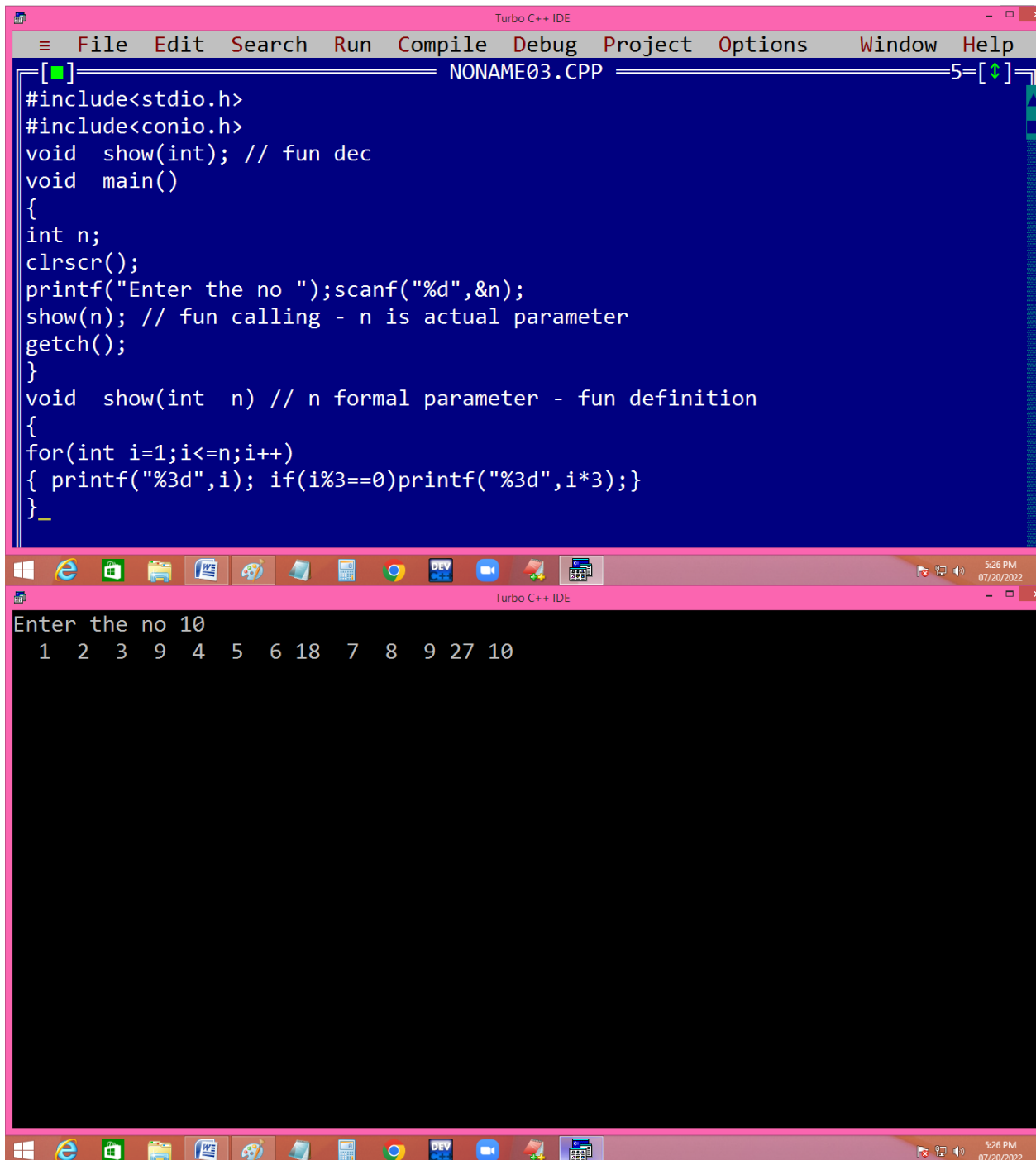
```
#include<stdio.h>
#include<conio.h>
int sum(int,int); // fun declaration
int sum(int x, int y) // x,y is formal parameters - fun definition
{
return x+y;
}
void main()
{
int a,b;
clrscr();
printf("Enter a, b values "); scanf("%d %d",&a, &b);
printf("Sum=%d",sum(a,b)); // fun calling - a, b actual parameters
getch();
}
```

Enter a, b values 10 12
Sum=22_

Fun with arguments, without return value.

Printing below series using a user defined function.

Ex: $n=10 \rightarrow 1\ 2\ 3\ 9\ 4\ 5\ 6\ 18\ 7\ 8\ 9\ 27\ 10$



The screenshot shows the Turbo C++ IDE with a C++ program in a file named NONAME03.CPP. The program defines a function 'show' that prints numbers from 1 to n, with multiples of 3 printed on the same line as their preceding number. The main function calls 'show' with the user input '10'. The output window shows the sequence: 1 2 3 9 4 5 6 18 7 8 9 27 10.

```
#include<stdio.h>
#include<conio.h>
void show(int); // fun dec
void main()
{
    int n;
    clrscr();
    printf("Enter the no ");scanf("%d",&n);
    show(n); // fun calling - n is actual parameter
    getch();
}
void show(int n) // n formal parameter - fun definition
{
    for(int i=1;i<=n;i++)
    { printf("%3d",i); if(i%3==0)printf("%3d",i*3);}
} _
```

Enter the no 10
1 2 3 9 4 5 6 18 7 8 9 27 10

print below output using a user defined function.

$n=5 \rightarrow 1-2+3-4+5=3$

```
Turbo C++ IDE
#include<stdio.h>
#include<conio.h>
void show(int); // fun dec
void main()
{
    int n;
    clrscr();
    printf("Enter the no ");scanf("%d",&n);
    show(n); // fun calling - n is actual parameter
    getch();
}
void show(int n) // n formal parameter - fun definition
{
    int s=0,i;
    for(i=1;i<=n;i++)
    { if(i%2==0)printf("%d+",i,s-=i); else printf("%d-",i,s+=i);}
    printf("\b=%d",s);
}

Enter the no 5
1-2+3-4+5=3

Turbo C++ IDE
```


$$5 < \begin{array}{l} 1 + 3 + 5 = 9 \\ -2 + -4 = -6 \\ \hline 3 \end{array}$$

$$1-2+3-4+5=3$$

```
s=0;
for(i=1;i<=5;i++)
{
    if(i%2==0)p("%d+",i,s-=i);
    else p("%d-",i,s+=i);
} p("\b=%d",s);
```

The image shows a screenshot of the Turbo C++ IDE. The top window, titled "NONAME04.CPP", contains the following C++ code:

```
#include<stdio.h>
#include<conio.h>
void show(int x, int y) // fun def
{
printf("x=%d, y=%d",x,y);
}
void main()
{
int a=-3;
void show(int, int); // fun dec
clrscr();
show(a++,a++); // fun calling
getch();
}
// in fun calling arguments passed from right to left_
```

The bottom window shows the output of the program: "x=-2, y=-3". The IDE's menu bar includes File, Edit, Search, Run, Compile, Debug, Project, Options, Window, and Help. The Windows taskbar at the bottom shows the time as 5:45 PM on 07/20/2022.