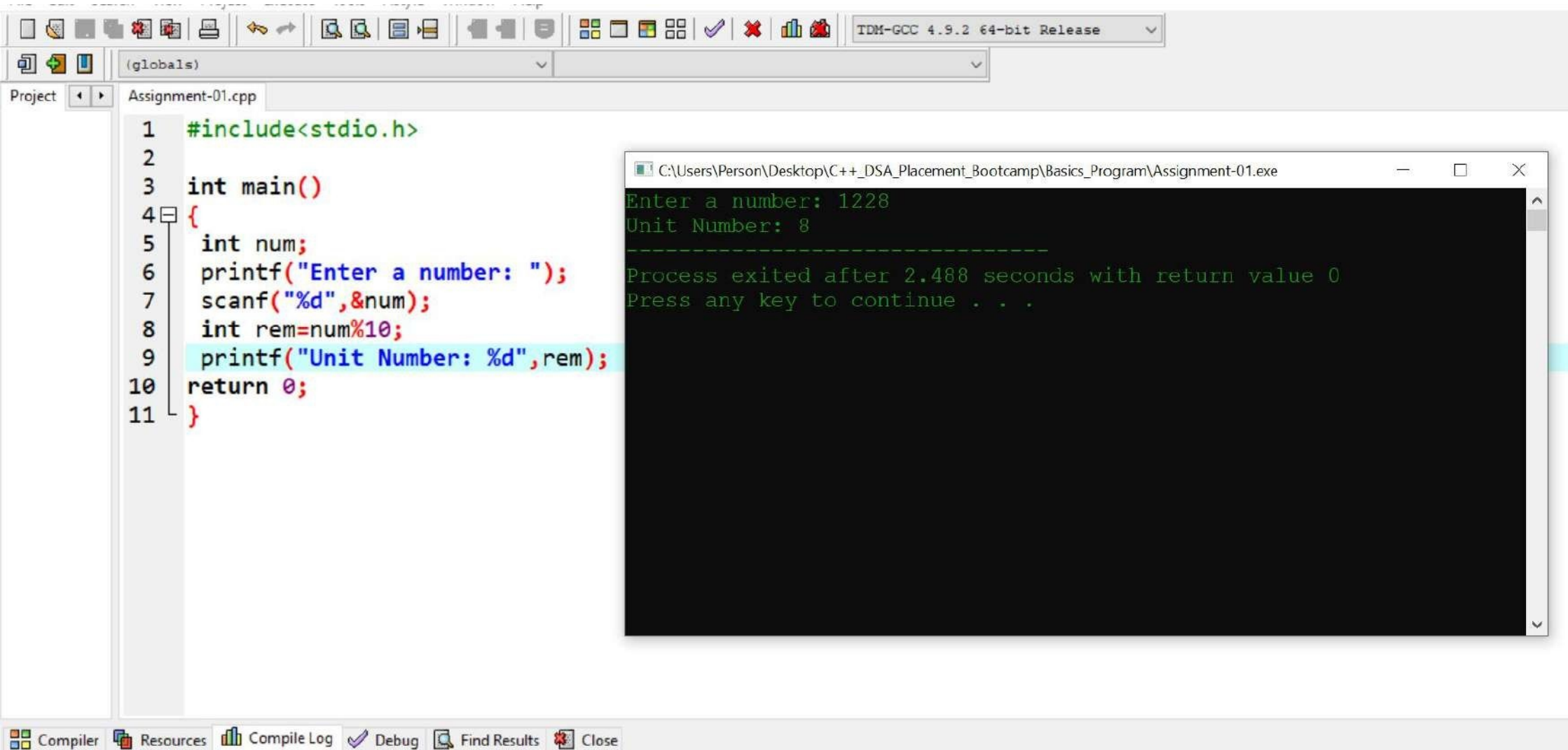


1. Write a program to print unit digit of a given number



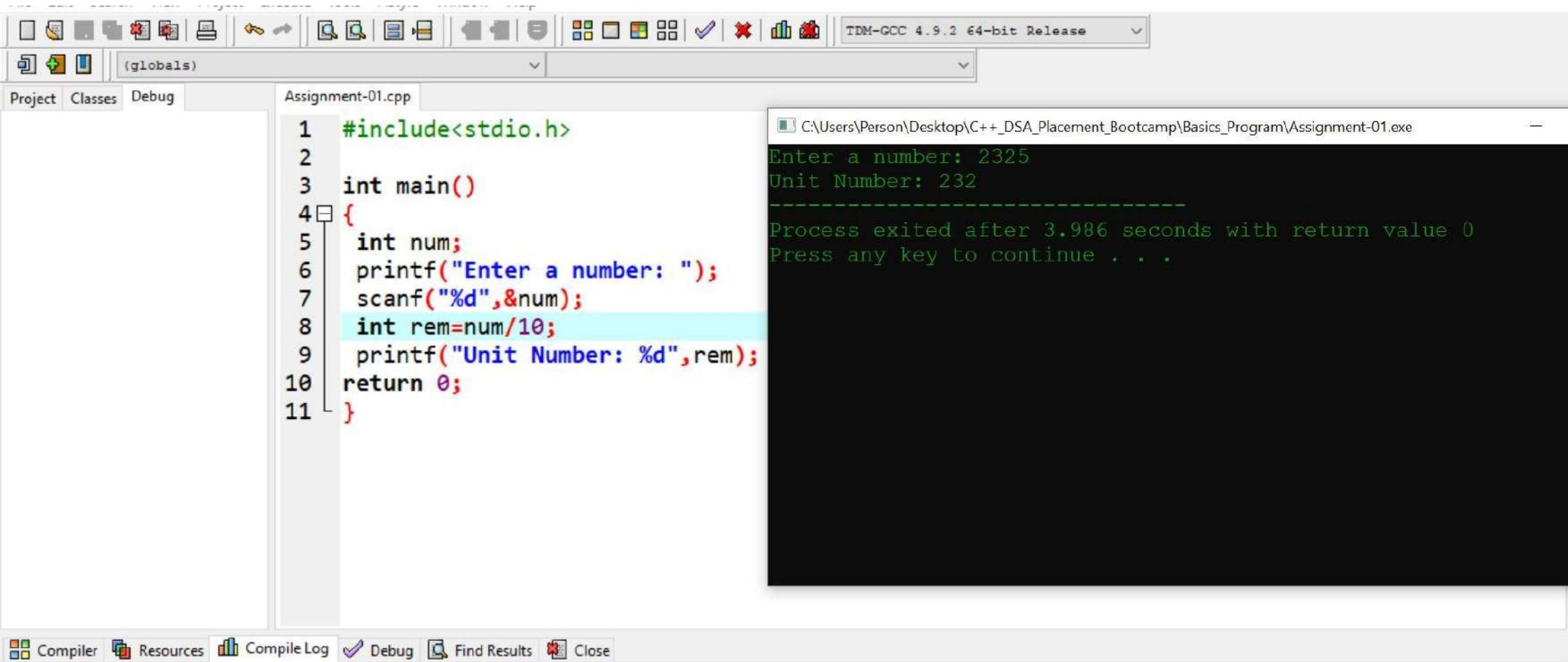
The image shows a C++ IDE with a source code editor on the left and a console window on the right. The source code is as follows:

```
1 #include<stdio.h>
2
3 int main()
4 {
5     int num;
6     printf("Enter a number: ");
7     scanf("%d",&num);
8     int rem=num%10;
9     printf("Unit Number: %d",rem);
10    return 0;
11 }
```

The console window, titled "C:\Users\Person\Desktop\C++\_DSA\_Placement\_Bootcamp\Basics\_Program\Assignment-01.exe", displays the following output:

```
Enter a number: 1228
Unit Number: 8
-----
Process exited after 2.488 seconds with return value 0
Press any key to continue . . .
```

2. Write a program to print a given number without its last digit.



The screenshot shows a C++ IDE with a project named "Assignment-01.cpp". The code in the editor is as follows:

```
1 #include<stdio.h>
2
3 int main()
4 {
5     int num;
6     printf("Enter a number: ");
7     scanf("%d",&num);
8     int rem=num/10;
9     printf("Unit Number: %d",rem);
10    return 0;
11 }
```

The output window shows the execution of the program:

```
C:\Users\Person\Desktop\C++_DSA_Placement_Bootcamp\Basics_Program\Assignment-01.exe
Enter a number: 2325
Unit Number: 232
-----
Process exited after 3.986 seconds with return value 0
Press any key to continue . . .
```

3. Write a program to swap values of two int variables



Assignment-01.cpp

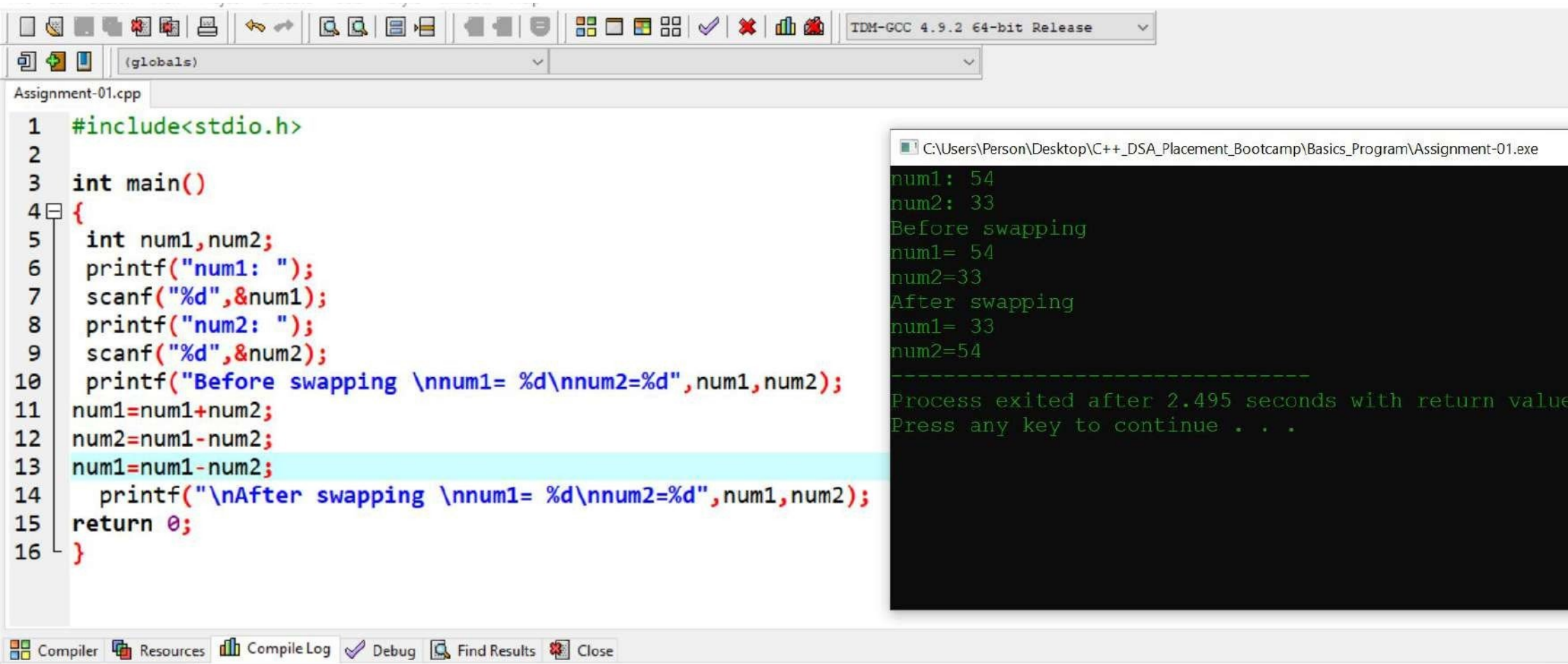
```
1  #include<stdio.h>
2
3  int main()
4  {
5      int num1,num2,temp;
6      printf("num1: ");
7      scanf("%d",&num1);
8      printf("num2: ");
9      scanf("%d",&num2);
10     printf("Before swapping \nnum1= %d\nnum2=%d",num1,num2);
11     temp=num1;
12     num1=num2;
13     num2=temp;
14     printf("\nAfter swapping \nnum1= %d\nnum2=%d",num1,num2);
15     return 0;
16 }
```

The image shows a terminal window with the following output:

```
C:\Users\Person\Desktop\C++_DSA_Placement_Bootcamp\Basics_Program\Assig...
num1: 56
num2: 25
Before swapping
num1= 56
num2=25
After swapping
num1= 25
num2=56
-----
Process exited after 5.426 seconds with return value 0
Press any key to continue . . .
```

Compiler Resources Compile Log Debug Find Results

4. Write a program to swap values of two int variables without using a third variable.



```
1  #include<stdio.h>
2
3  int main()
4  {
5      int num1,num2;
6      printf("num1: ");
7      scanf("%d",&num1);
8      printf("num2: ");
9      scanf("%d",&num2);
10     printf("Before swapping \nnum1= %d\nnum2=%d",num1,num2);
11     num1=num1+num2;
12     num2=num1-num2;
13     num1=num1-num2;
14     printf("\nAfter swapping \nnum1= %d\nnum2=%d",num1,num2);
15     return 0;
16 }
```

```
C:\Users\Person\Desktop\C++_DSA_Placement_Bootcamp\Basics_Program\Assignment-01.exe
num1: 54
num2: 33
Before swapping
num1= 54
num2=33
After swapping
num1= 33
num2=54
-----
Process exited after 2.495 seconds with return value
Press any key to continue . . .
```

5. Write a program to input a three-digit number and display the sum of the digits.

The screenshot shows a C++ IDE with a project named 'main.cpp'. The code is as follows:

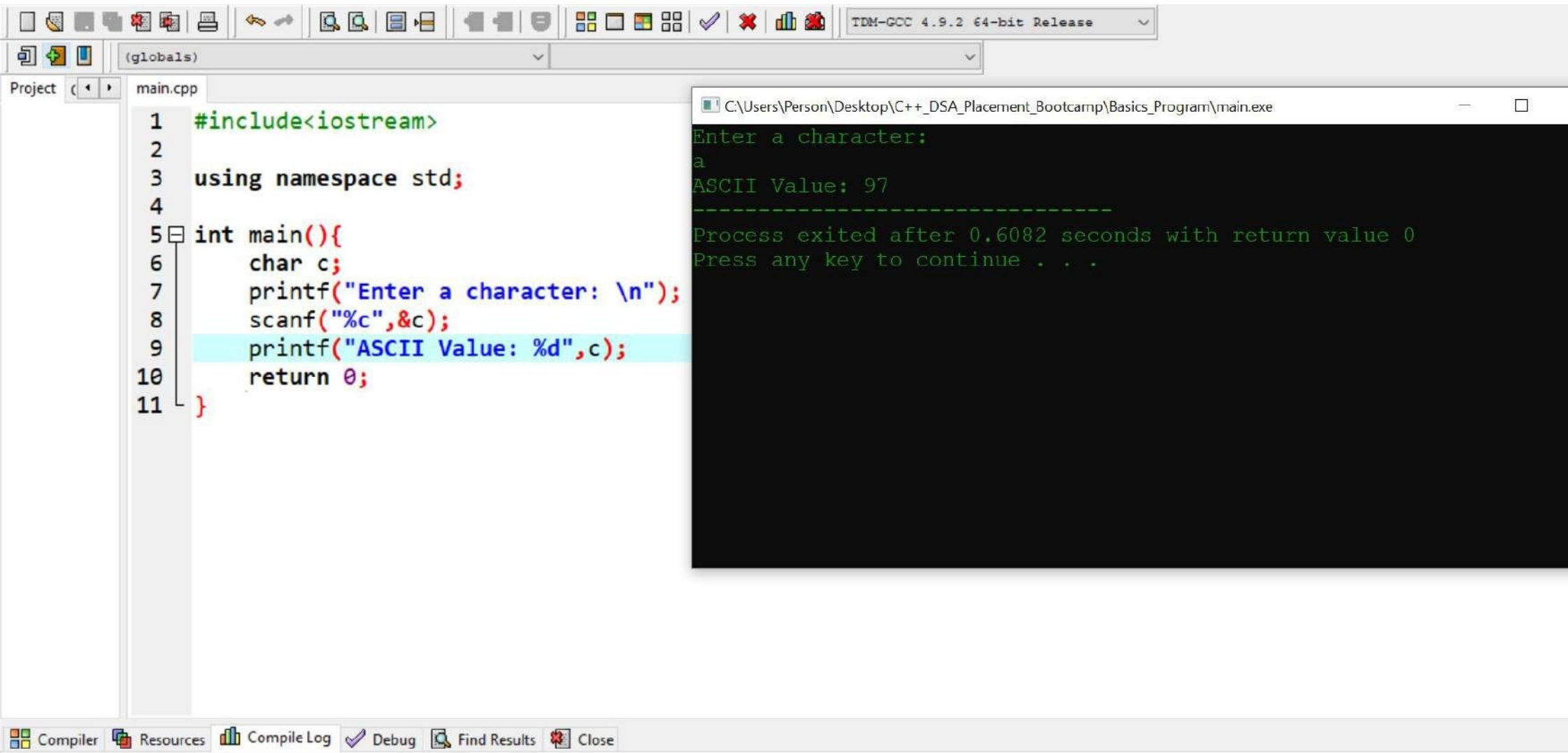
```
1 #include<iostream>
2
3 using namespace std;
4
5 int main(){
6     int num;
7     printf("Enter a three digit number:\n");
8     scanf("%d",&num);
9     int a,b,c,d;
10    a=num%10;
11    b=num/10;
12    c=b%10;
13    d=b/10;
14    printf("Sum of three-digit number: %d\n",a+c+d);
15    return 0;
16 }
```

The output window shows the execution of the program:

```
C:\Users\Person\Desktop\C++_DSA_Placement_Bootcamp\Basics_Program\main.exe
Enter a three digit number:
999
Sum of three-digit number: 27
-----
Process exited after 3.01 seconds with return value
Press any key to continue . . .
```



6. Write a program which takes a character as an input and displays its ASCII code.



The image shows a C++ IDE with a project named 'main.cpp'. The code in the editor is as follows:

```
1 #include<iostream>
2
3 using namespace std;
4
5 int main(){
6     char c;
7     printf("Enter a character: \n");
8     scanf("%c",&c);
9     printf("ASCII Value: %d",c);
10    return 0;
11 }
```

The output window shows the execution of the program:

```
C:\Users\Person\Desktop\C++_DSA_Placement_Bootcamp\Basics_Program\main.exe
Enter a character:
a
ASCII Value: 97
-----
Process exited after 0.6082 seconds with return value 0
Press any key to continue . . .
```

The IDE interface includes a toolbar at the top with icons for file operations, a dropdown menu showing '(globals)', a project pane on the left, and a status bar at the bottom with buttons for Compiler, Resources, Compile Log, Debug, Find Results, and Close.

9. Write a program to print size of an int, a float, a char and a double type variable

The image shows a C++ IDE with a source code editor on the left and a console window on the right. The source code in `main.cpp` is as follows:

```
1 #include<iostream>
2
3 using namespace std;
4
5 int main(){
6     int num;
7     float real;
8     char c;
9     double d;
10    printf("Size of int %d:\n",sizeof(num));
11    printf("Size of float %d:\n",sizeof(real));
12    printf("Size of char :%d\n",sizeof(c));
13    printf("Size of double :%d\n",sizeof(d));
14    return 0;
15 }
```

The console window, titled `C:\Users\Person\Desktop\C++_DSA_Placement_Bootcamp\Basics_Program\main.exe`, displays the output of the program:

```
Size of int 4:
Size of float 4:
Size of char :1
Size of double :8

-----
Process exited after 0.1099 seconds with return va
Press any key to continue . . .
```

The IDE interface includes a toolbar at the top with icons for file operations and compilation, and a status bar at the bottom with buttons for Compiler, Resources, Compile Log, Debug, Find Results, and Close. The compiler is identified as TDM-GCC 4.9.2 64-bit Release.

10. Write a program to make the last digit of a number stored in a variable as zero.

(Example - if x=2345 then make it x=2340)

The screenshot shows a C++ IDE with a project named 'main.cpp'. The code in the editor is as follows:

```
1 #include<iostream>
2
3 using namespace std;
4
5 int main(){
6     int num;
7     printf("Enter a number:\n");
8     scanf("%d",&num);
9     int rem=(num/10)*10;
10    printf("%d",rem);
11    return 0;
12 }
```

The line `int rem=(num/10)*10;` is highlighted in blue. To the right of the code editor, a terminal window titled 'C:\Users\Person\Desktop\C++\_DSA\_Placement\_Bootcamp\Basics\_Program\main.exe' displays the program's execution. It prompts 'Enter a number:', shows the input '2345', and the output '2340'. Below the output, it states 'Process exited after 1.915 seconds with return value 0' and 'Press any key to continue . . .'. The IDE's toolbar at the top includes icons for file operations, compilation, and debugging, with a dropdown menu set to 'TDM-GCC 4.9.2 64-bit Release'. The bottom status bar shows 'Compiler', 'Resources', 'Compile Log', 'Debug', 'Find Results', and 'Close' buttons.



11. Write a program to input a number from the user and also input a digit. Append a digit in the number and print the resulting number. (Example - number=234 and digit=9 then the resulting number is 2349)

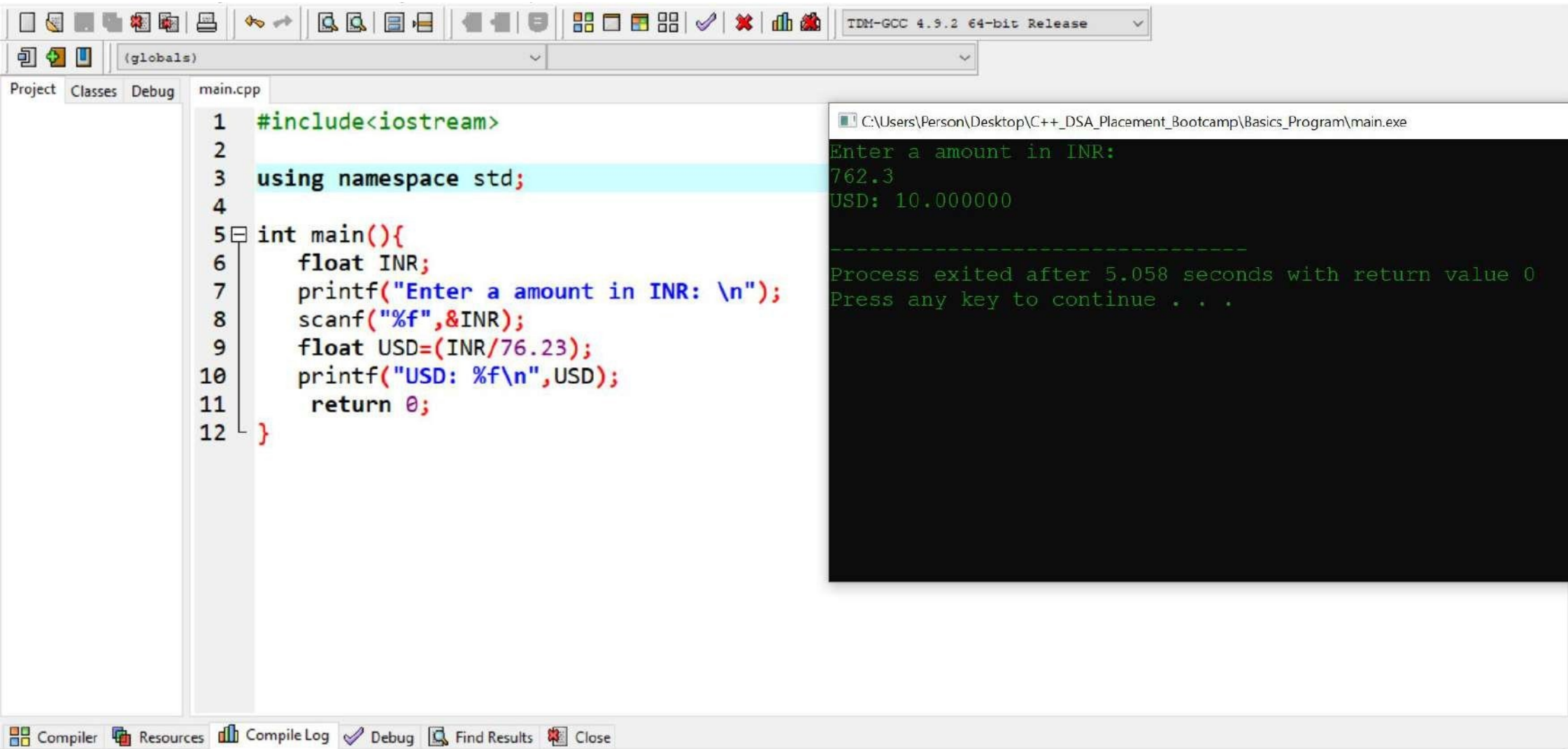
The screenshot shows a C++ IDE with a project named "main.cpp". The code in the editor is as follows:

```
1 #include<iostream>
2
3 using namespace std;
4
5 int main(){
6     int num;
7     printf("Enter a number:\n");
8     scanf("%d",&num);
9     int rem=(num*10)+9;
10    // int rem1=rem-1;
11    printf("%d",rem);
12    return 0;
13 }
```

The output window shows the execution of the program:

```
C:\Users\Person\Desktop\C++_DSA_Placement_Bootcamp\Basics_Program\main.exe
Enter a number:
234
2349
-----
Process exited after 3.921 seconds with return value 0
Press any key to continue . . .
```

12. Assume price of 1 USD is INR 76.23. Write a program to take the amount in INR and convert it into USD.



The screenshot shows a C++ IDE with a project named 'main.cpp'. The code is as follows:

```
1 #include<iostream>
2
3 using namespace std;
4
5 int main(){
6     float INR;
7     printf("Enter a amount in INR: \n");
8     scanf("%f",&INR);
9     float USD=(INR/76.23);
10    printf("USD: %f\n",USD);
11    return 0;
12 }
```

The output window shows the execution of the program:

```
C:\Users\Person\Desktop\C++_DSA_Placement_Bootcamp\Basics_Program\main.exe
Enter a amount in INR:
762.3
USD: 10.000000

-----
Process exited after 5.058 seconds with return value 0
Press any key to continue . . .
```