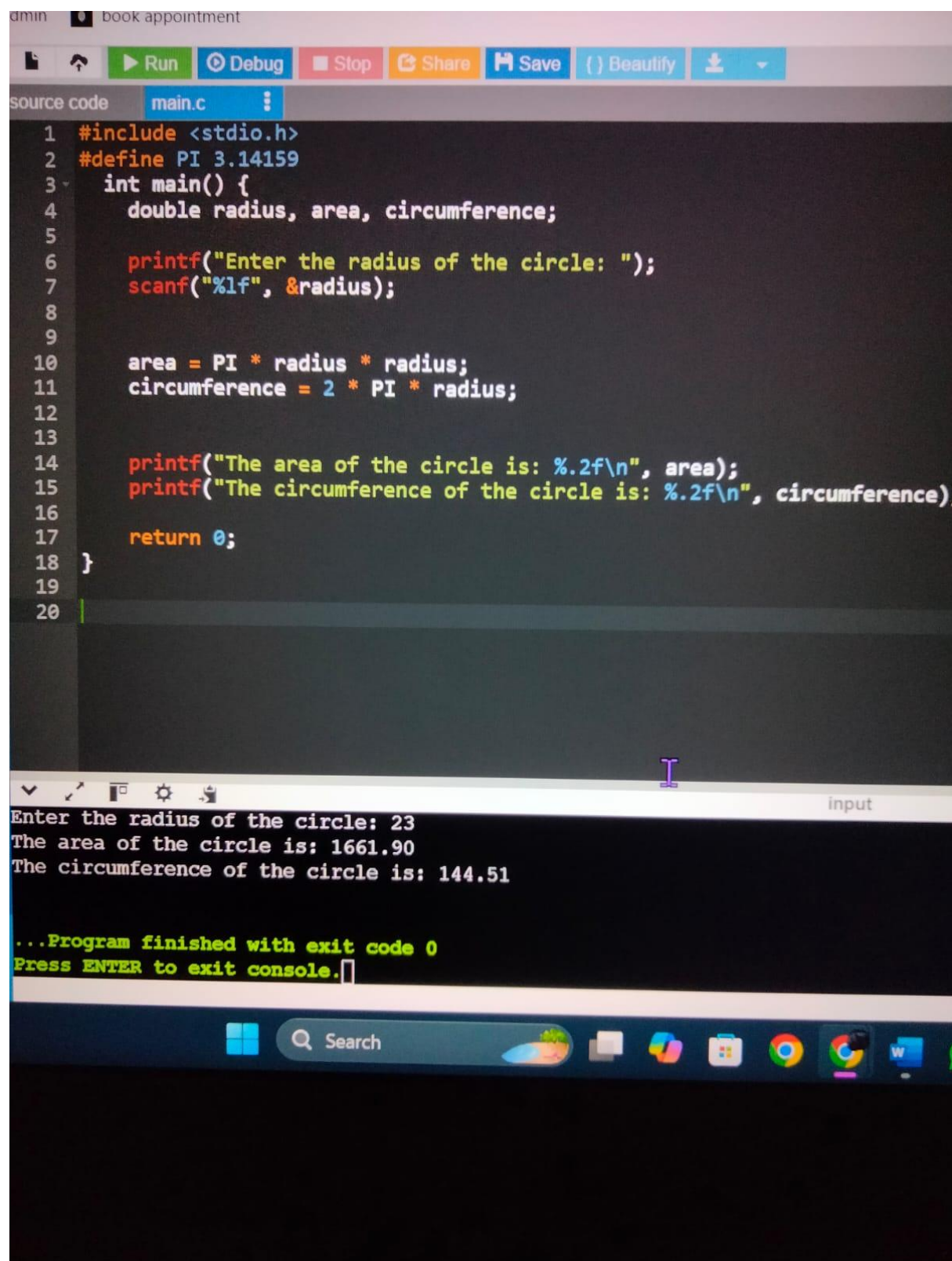


1-Write a program to calculate the circumference and area of a circle given its radius. Use the formulas: Area: πr^2 Circumference: $2\pi r$



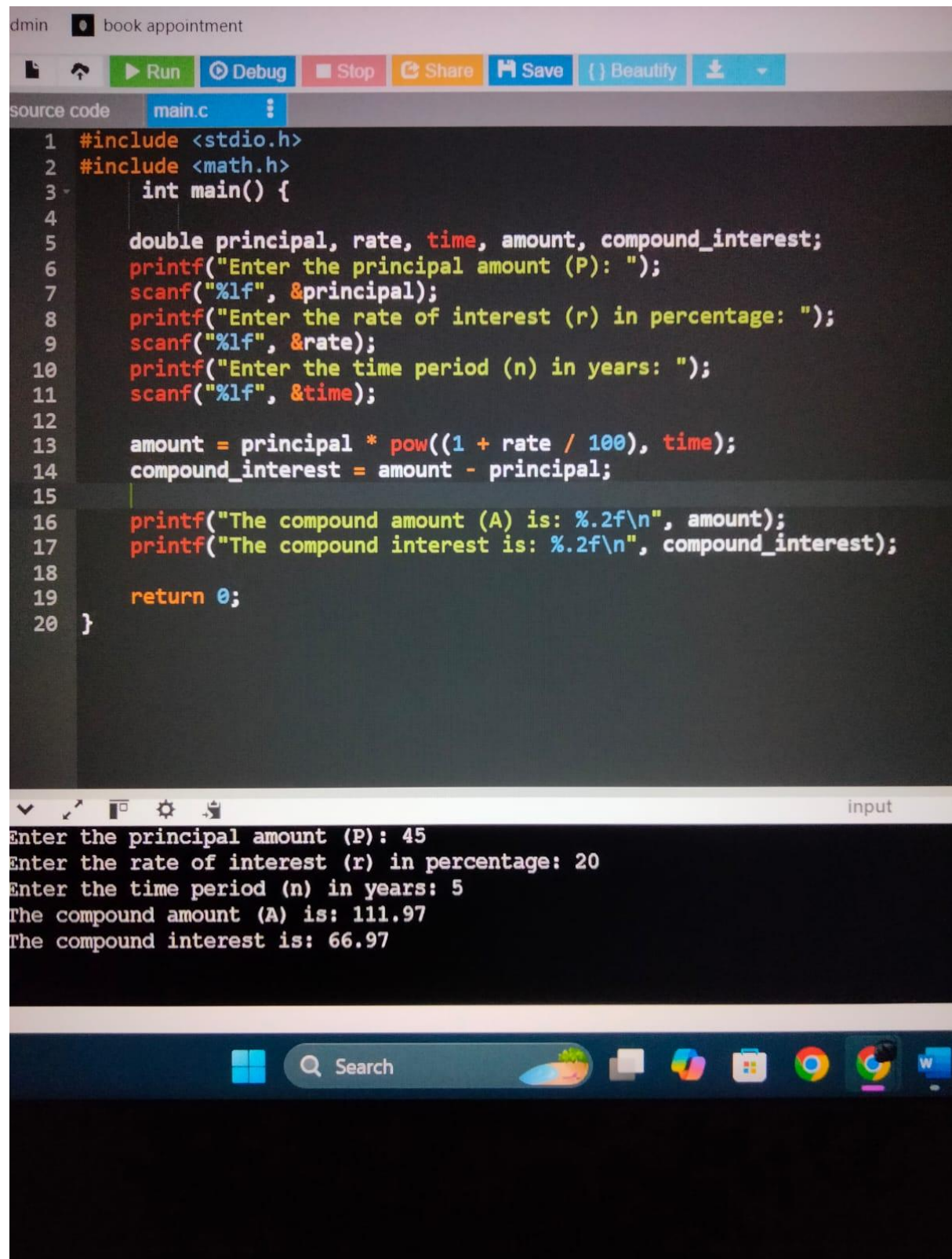
```
1  #include <stdio.h>
2  #define PI 3.14159
3  int main() {
4      double radius, area, circumference;
5
6      printf("Enter the radius of the circle: ");
7      scanf("%lf", &radius);
8
9
10     area = PI * radius * radius;
11     circumference = 2 * PI * radius;
12
13
14     printf("The area of the circle is: %.2f\n", area);
15     printf("The circumference of the circle is: %.2f\n", circumference);
16
17     return 0;
18 }
19
20
```

Enter the radius of the circle: 23
The area of the circle is: 1661.90
The circumference of the circle is: 144.51

...Program finished with exit code 0
Press ENTER to exit console.

2. Write a program to calculate the compound interest using the formula:

$A = P \times (1 + (r/100))^n$ where P is the principal, r is the rate of interest, and n is the time period.



The image shows a screenshot of a code editor window titled 'book appointment' with a user 'dmin'. The editor contains a C program for calculating compound interest. The code is as follows:

```
1 #include <stdio.h>
2 #include <math.h>
3 int main() {
4
5     double principal, rate, time, amount, compound_interest;
6     printf("Enter the principal amount (P): ");
7     scanf("%lf", &principal);
8     printf("Enter the rate of interest (r) in percentage: ");
9     scanf("%lf", &rate);
10    printf("Enter the time period (n) in years: ");
11    scanf("%lf", &time);
12
13    amount = principal * pow((1 + rate / 100), time);
14    compound_interest = amount - principal;
15
16    printf("The compound amount (A) is: %.2f\n", amount);
17    printf("The compound interest is: %.2f\n", compound_interest);
18
19    return 0;
20 }
```

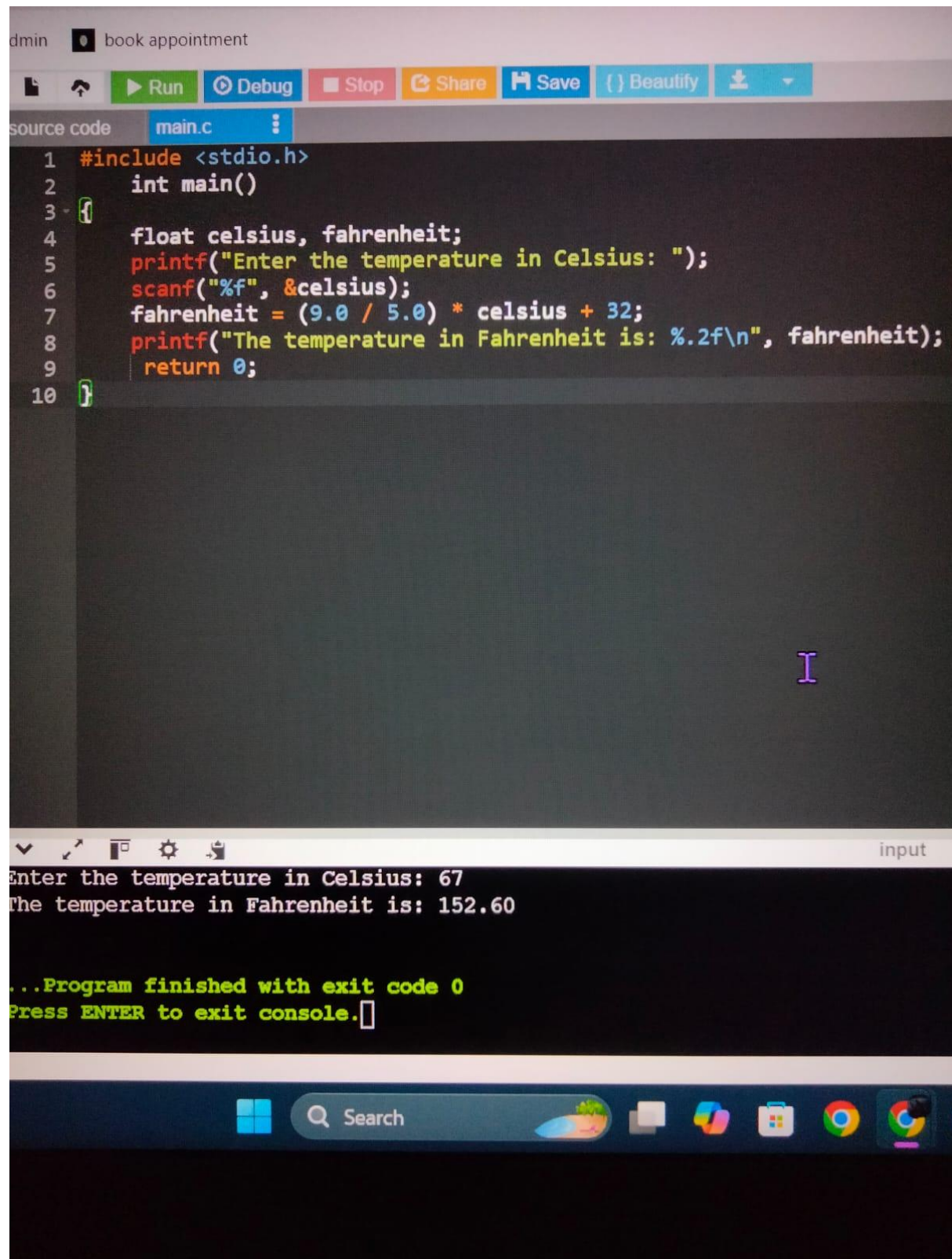
Below the code editor, there is a terminal window showing the program's execution. The input values are 45 for principal, 20 for rate, and 5 for time. The output shows a compound amount of 111.97 and a compound interest of 66.97.

```
input
Enter the principal amount (P): 45
Enter the rate of interest (r) in percentage: 20
Enter the time period (n) in years: 5
The compound amount (A) is: 111.97
The compound interest is: 66.97
```

The bottom of the image shows a Windows taskbar with the Start button, a search bar, and several application icons including File Explorer, Microsoft Edge, and Google Chrome.

3-Write a program to convert a temperature from Celsius to Fahrenheit using the formula:

$$F = (9/5) * C + 32$$



The image shows a screenshot of a code editor window titled 'book appointment' with a user 'admin'. The editor contains a C program for converting Celsius to Fahrenheit. The code is as follows:

```
1 #include <stdio.h>
2 int main()
3 {
4     float celsius, fahrenheit;
5     printf("Enter the temperature in Celsius: ");
6     scanf("%f", &celsius);
7     fahrenheit = (9.0 / 5.0) * celsius + 32;
8     printf("The temperature in Fahrenheit is: %.2f\n", fahrenheit);
9     return 0;
10 }
```

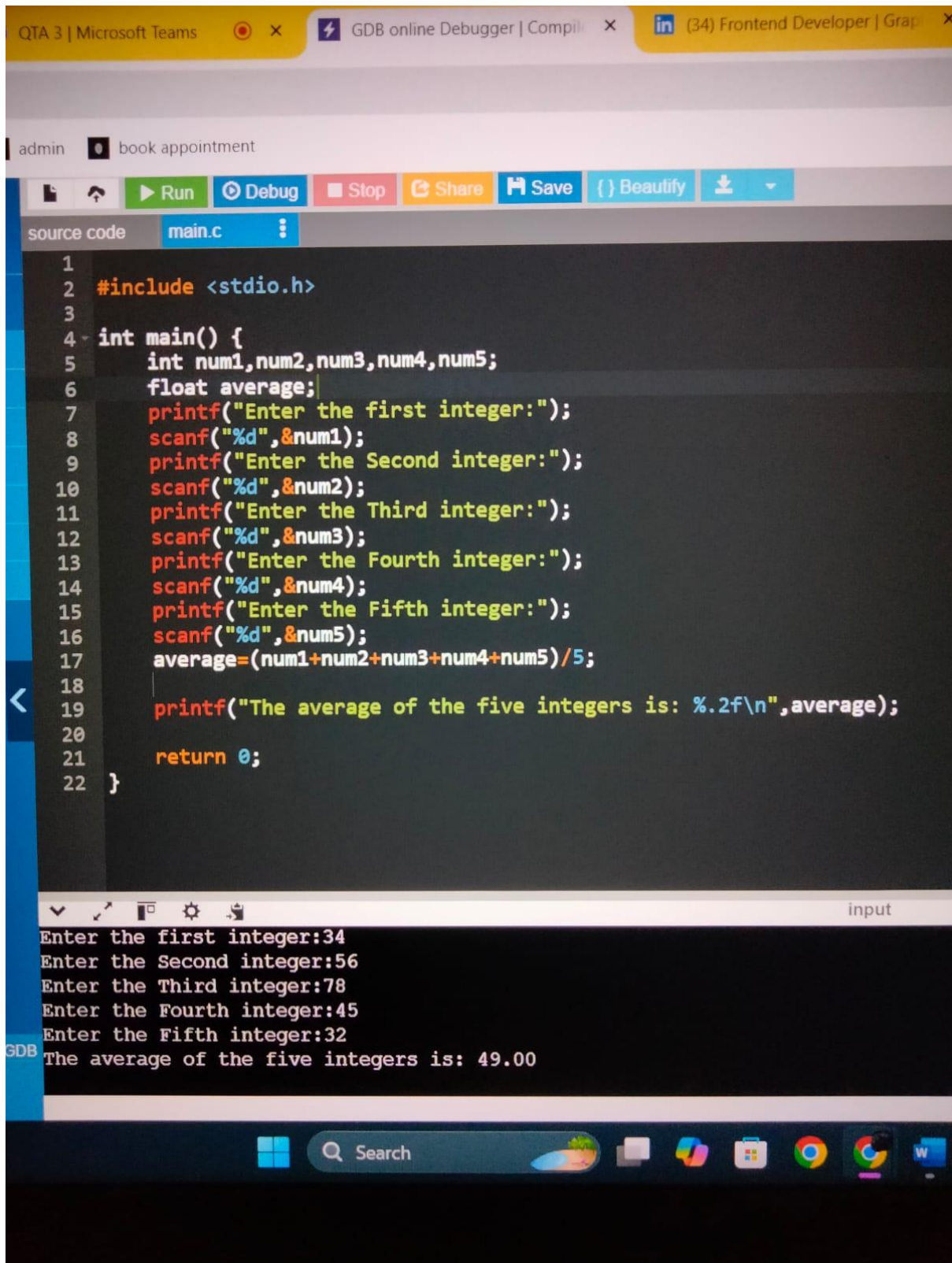
Below the code editor is a terminal window showing the program's execution. It prompts for input, receives '67', and outputs '152.60'. The terminal also shows the program finished with exit code 0 and a prompt to press ENTER to exit the console.

```
input
Enter the temperature in Celsius: 67
The temperature in Fahrenheit is: 152.60

...Program finished with exit code 0
Press ENTER to exit console.
```

The Windows taskbar is visible at the bottom of the screen, showing the Start button, a search bar, and several application icons including File Explorer, Microsoft Edge, and Google Chrome.

4-Write a program to calculate the average of five integers provided by the user.



The screenshot shows a web-based IDE interface. At the top, there are browser tabs for 'QTA 3 | Microsoft Teams', 'GDB online Debugger | Compil...', and '(34) Frontend Developer | Grap...'. Below the tabs, there's a header with 'admin' and a 'book appointment' button. The main toolbar includes 'Run', 'Debug', 'Stop', 'Share', 'Save', 'Beautify', and a download icon. The 'source code' tab is active, showing a C program in 'main.c'. The code is as follows:

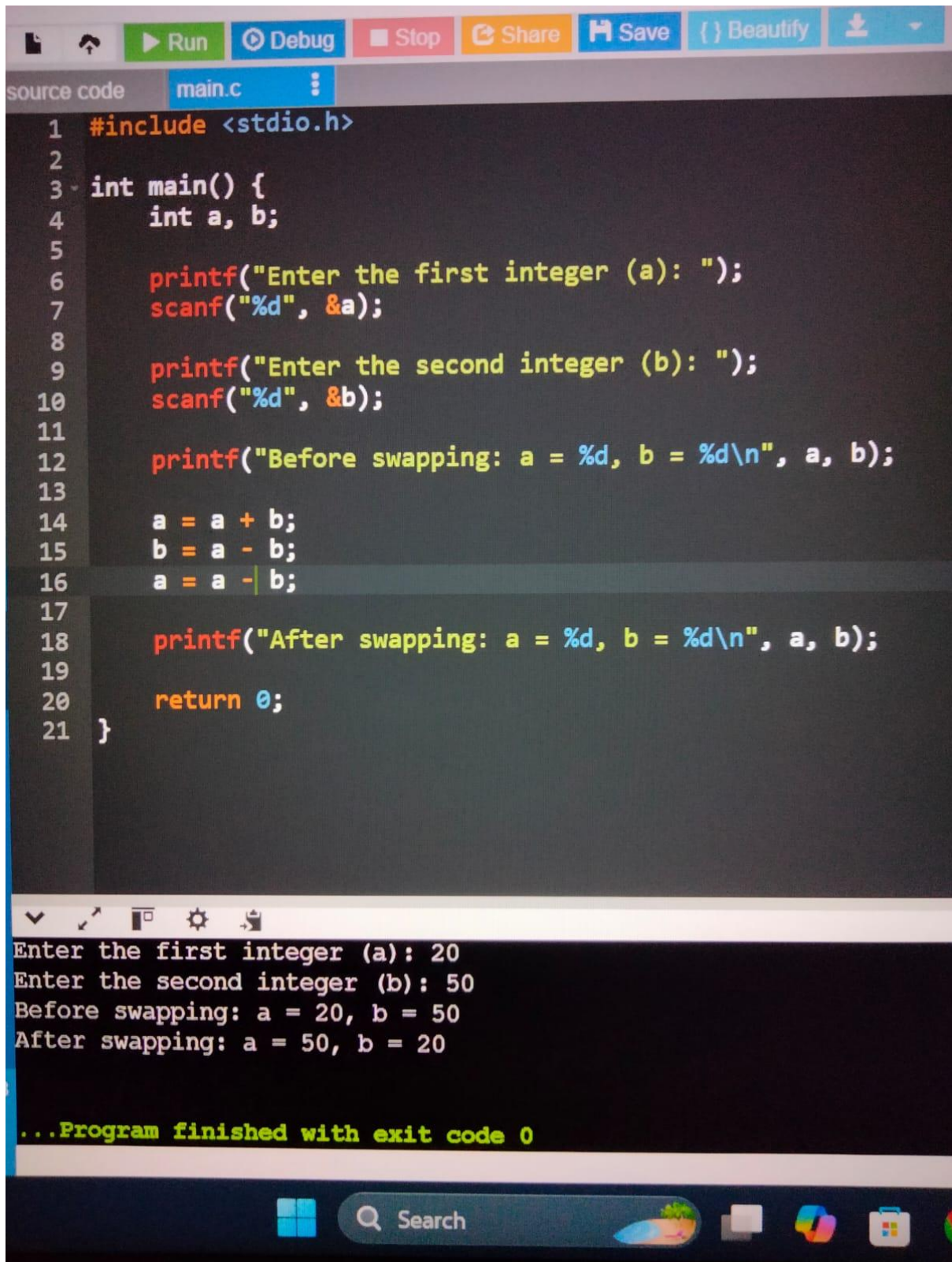
```
1
2 #include <stdio.h>
3
4 int main() {
5     int num1,num2,num3,num4,num5;
6     float average;
7     printf("Enter the first integer:");
8     scanf("%d",&num1);
9     printf("Enter the Second integer:");
10    scanf("%d",&num2);
11    printf("Enter the Third integer:");
12    scanf("%d",&num3);
13    printf("Enter the Fourth integer:");
14    scanf("%d",&num4);
15    printf("Enter the Fifth integer:");
16    scanf("%d",&num5);
17    average=(num1+num2+num3+num4+num5)/5;
18
19    printf("The average of the five integers is: %.2f\n",average);
20
21    return 0;
22 }
```

Below the code editor, there's an 'input' section showing the program's execution:

```
Enter the first integer:34
Enter the Second integer:56
Enter the Third integer:78
Enter the Fourth integer:45
Enter the Fifth integer:32
The average of the five integers is: 49.00
```

The Windows taskbar is visible at the bottom with the Start button, Search bar, and several application icons.

5-Write a program to swap the values of two variables without using a third variable, relying only on arithmetic operations.



```
1  #include <stdio.h>
2
3  int main() {
4      int a, b;
5
6      printf("Enter the first integer (a): ");
7      scanf("%d", &a);
8
9      printf("Enter the second integer (b): ");
10     scanf("%d", &b);
11
12     printf("Before swapping: a = %d, b = %d\n", a, b);
13
14     a = a + b;
15     b = a - b;
16     a = a - b;
17
18     printf("After swapping: a = %d, b = %d\n", a, b);
19
20     return 0;
21 }
```

Enter the first integer (a): 20
Enter the second integer (b): 50
Before swapping: a = 20, b = 50
After swapping: a = 50, b = 20

...Program finished with exit code 0

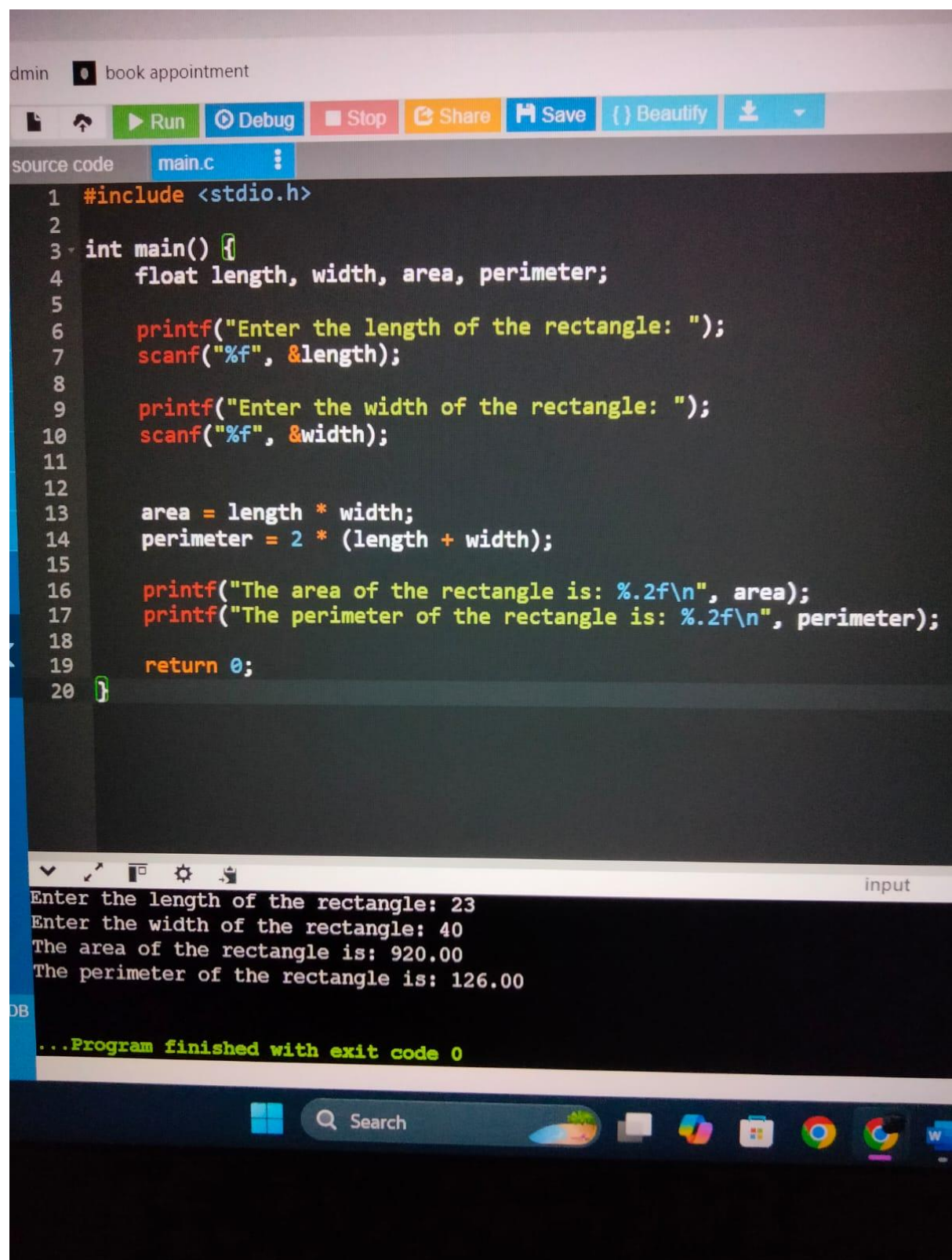
6-Write a program to perform addition, subtraction, multiplication, division, and modulus operations on two user-provided integers.

```
1
2 #include <stdio.h>
3
4 int main() {
5     int num1,num2;
6     printf("Enter the first integer:");
7     scanf("%d",&num1);
8     printf("Enter the Second integer:");
9     scanf("%d",&num2);
10
11     printf("Addition:%d+%d=%d\n",num1,num2,num1+num2);
12     printf("Subtraction:%d-%d=%d\n",num1,num2,num1-num2);
13     printf("Multiplication:%d*%d=%d\n",num1,num2,num1*num2);
14
15     if(num2 !=0)
16     {
17         printf("Division:%d/%d=%d\n",num1,num2,num1/num2);
18         printf("Modulus:%d%%%d=%d\n",num1,num2,num1%num2);
19     }
20     else{
21         printf("Null Value");
22     }
23     return 0;
24 }
```

input

```
Enter the first integer:23
Enter the Second integer:222
Addition:23+222=245
Subtraction:23-222=-199
Multiplication:23*222=5106
Division:23/222=0
Modulus:23%222=23
```

7-Compute and display the area and perimeter of a rectangle given its length and width.



The image shows a code editor window with a dark theme. The top bar includes a username 'admin' and a project name 'book appointment'. Below the bar are buttons for 'Run', 'Debug', 'Stop', 'Share', 'Save', 'Beautify', and a download icon. The editor displays a C program in 'main.c' with 20 lines of code. The code includes `<stdio.h>`, defines `main()`, declares `length`, `width`, `area`, and `perimeter` as floats, prompts for input, calculates the area and perimeter, and prints the results. The output window at the bottom shows the program's execution with the input values 23 and 40, resulting in an area of 920.00 and a perimeter of 126.00. The Windows taskbar is visible at the bottom of the screen.

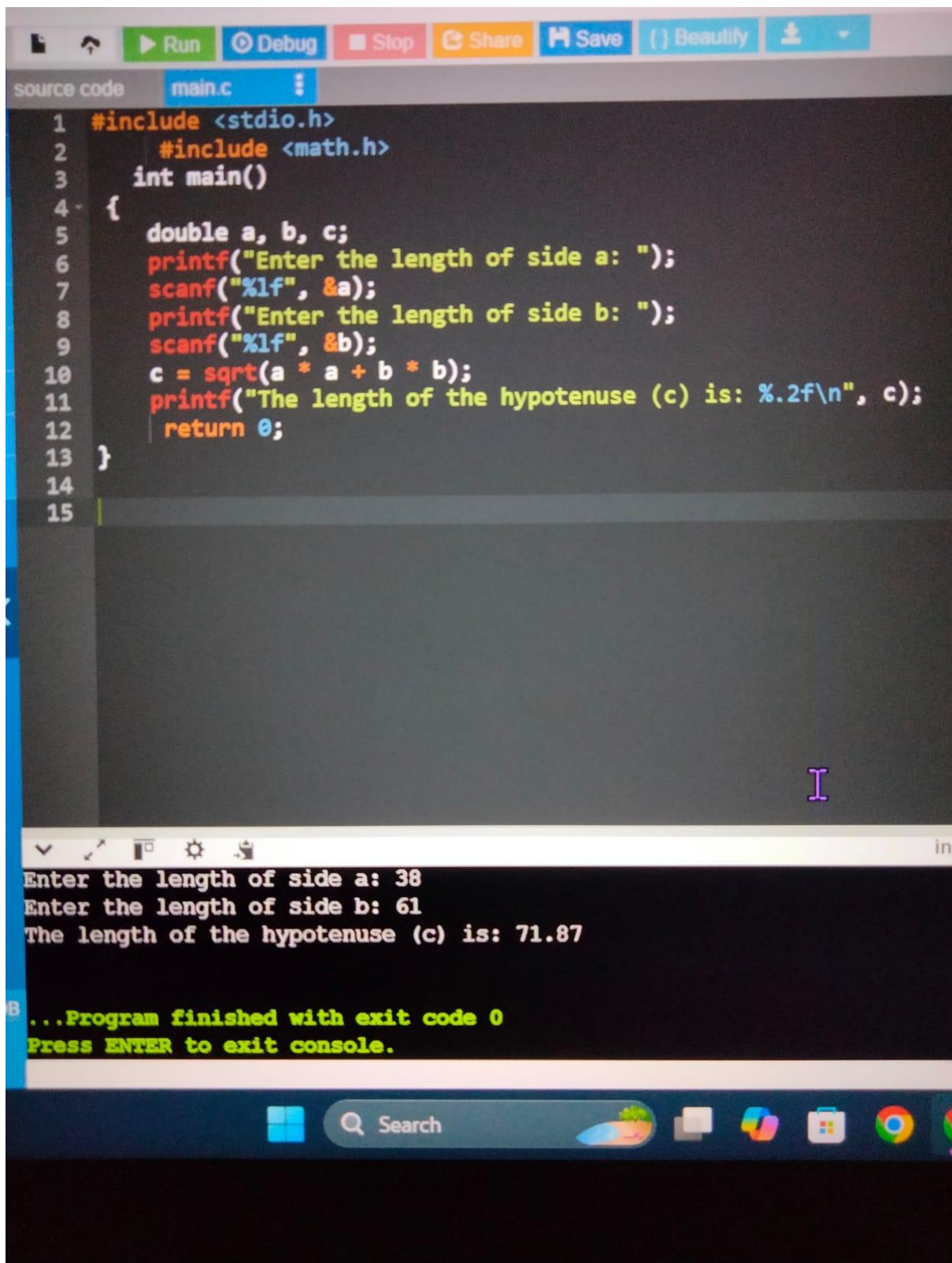
```
1 #include <stdio.h>
2
3 int main() {
4     float length, width, area, perimeter;
5
6     printf("Enter the length of the rectangle: ");
7     scanf("%f", &length);
8
9     printf("Enter the width of the rectangle: ");
10    scanf("%f", &width);
11
12
13    area = length * width;
14    perimeter = 2 * (length + width);
15
16    printf("The area of the rectangle is: %.2f\n", area);
17    printf("The perimeter of the rectangle is: %.2f\n", perimeter);
18
19    return 0;
20 }
```

input

Enter the length of the rectangle: 23
Enter the width of the rectangle: 40
The area of the rectangle is: 920.00
The perimeter of the rectangle is: 126.00

...Program finished with exit code 0

8- Calculate the hypotenuse of a right triangle given the lengths of the other two sides using the formula: $C = \sqrt{a^2 + b^2}$



The image shows a screenshot of a code editor and a terminal window. The code editor at the top displays a C program named 'main.c' with the following code:

```
1 #include <stdio.h>
2 #include <math.h>
3 int main()
4 {
5     double a, b, c;
6     printf("Enter the length of side a: ");
7     scanf("%lf", &a);
8     printf("Enter the length of side b: ");
9     scanf("%lf", &b);
10    c = sqrt(a * a + b * b);
11    printf("The length of the hypotenuse (c) is: %.2f\n", c);
12    return 0;
13 }
14
15
```

The terminal window at the bottom shows the program's execution:

```
Enter the length of side a: 38
Enter the length of side b: 61
The length of the hypotenuse (c) is: 71.87

...Program finished with exit code 0
Press ENTER to exit console.
```

The Windows taskbar is visible at the bottom of the screen, showing the Start button, a search bar, and several application icons including File Explorer, Microsoft Edge, and Google Chrome.

9-Write a program to find the sum of the digits of a given three-digit number.

```
source code  main.c
1  #include <stdio.h>
2  int main()
3  {
4      int number, sum = 0;
5      printf("Enter a three-digit number: ");
6      scanf("%d", &number);
7      if (number < 0) {
8          number = -number;
9      }
10     sum += number % 10;
11     number /= 10;
12     sum += number % 10;
13     number /= 10;
14     sum += number;
15     printf("The sum of the digits is: %d\n", sum);
16
17     return 0;
18 }
19
```

Enter a three-digit number: 56723
The sum of the digits is: 11

...Program finished with exit code 0
Press ENTER to exit console.

10-Write a program to calculate the profit or loss made on a transaction given the cost price and selling price of an item.

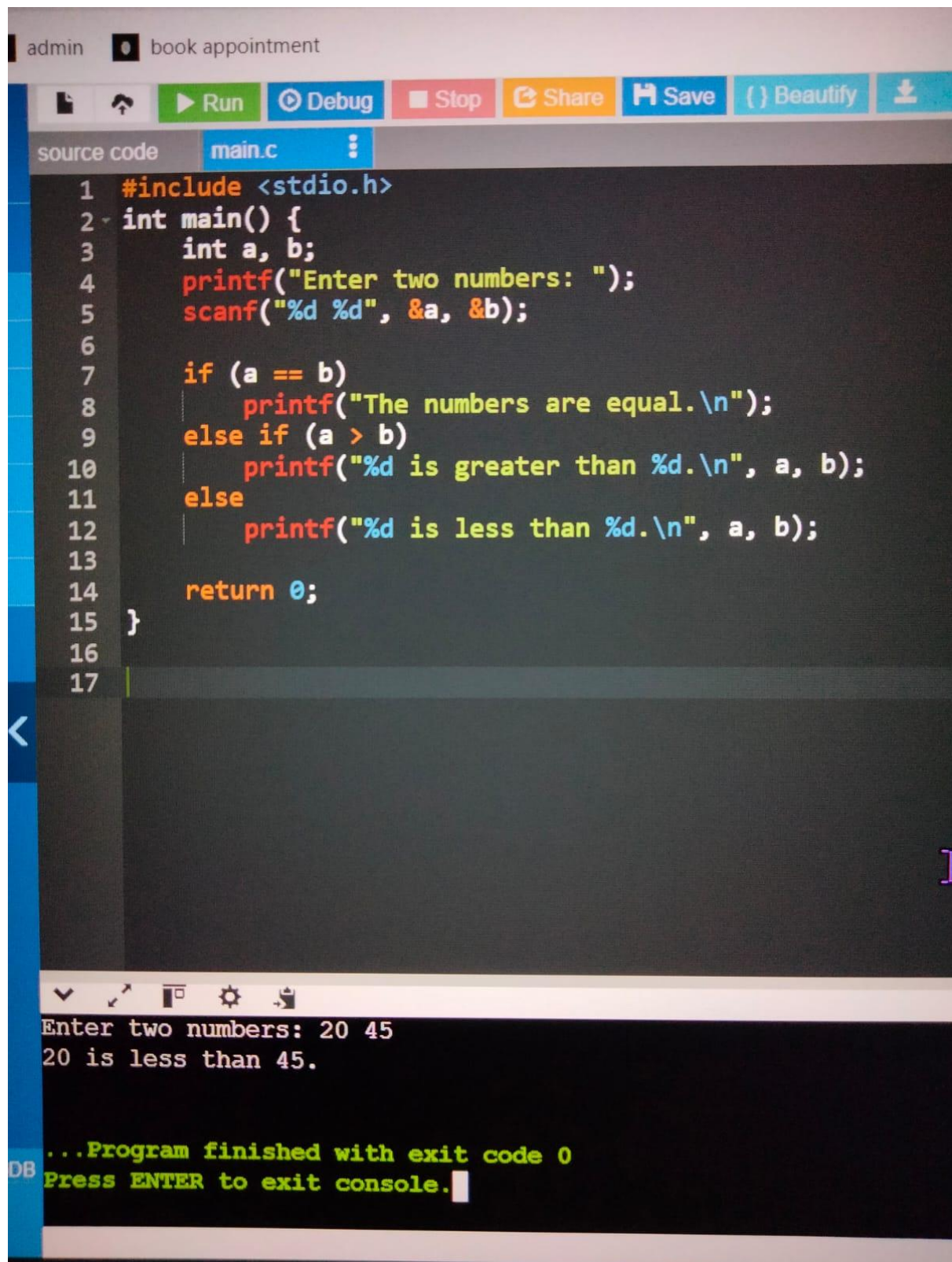
```
source code  main.c  ⋮
1  #include <stdio.h>
2  int main() {
3      float costPrice, sellingPrice, profitLoss;
4
5
6      printf("Enter the cost price of the item: ");
7      scanf("%f", &costPrice);
8
9      printf("Enter the selling price of the item: ");
10     scanf("%f", &sellingPrice);
11
12
13     profitLoss = sellingPrice - costPrice;
14
15     if (profitLoss > 0) {
16         printf("Profit: %.2f\n", profitLoss);
17     } else if (profitLoss < 0) {
18         printf("Loss: %.2f\n", -profitLoss);
19     } else {
20         printf("No Profit, No Loss\n");
21     }
22
23     return 0;
24 }
```

Enter the cost price of the item: 560
Enter the selling price of the item: 780
Profit: 220.00

...Program finished with exit code 0
Press ENTER to exit console.

11-Compare Two Numbers:

Write a program to check if two integers are equal, not equal, greater than, or less than each other using relational operators.

A screenshot of a code editor window titled 'book appointment' with a user 'admin'. The editor shows a C program in 'main.c'. The code includes <stdio.h>, defines a main function, declares two integers 'a' and 'b', prompts the user to 'Enter two numbers:', and reads two integers. It then uses an if-else structure to compare 'a' and 'b'. If they are equal, it prints 'The numbers are equal.'. If 'a' is greater than 'b', it prints '%d is greater than %d.'. If 'a' is less than 'b', it prints '%d is less than %d.'. The program returns 0. The console output shows the user entered '20 45' and the program printed '20 is less than 45.'. The console also shows '...Program finished with exit code 0' and 'Press ENTER to exit console.'.

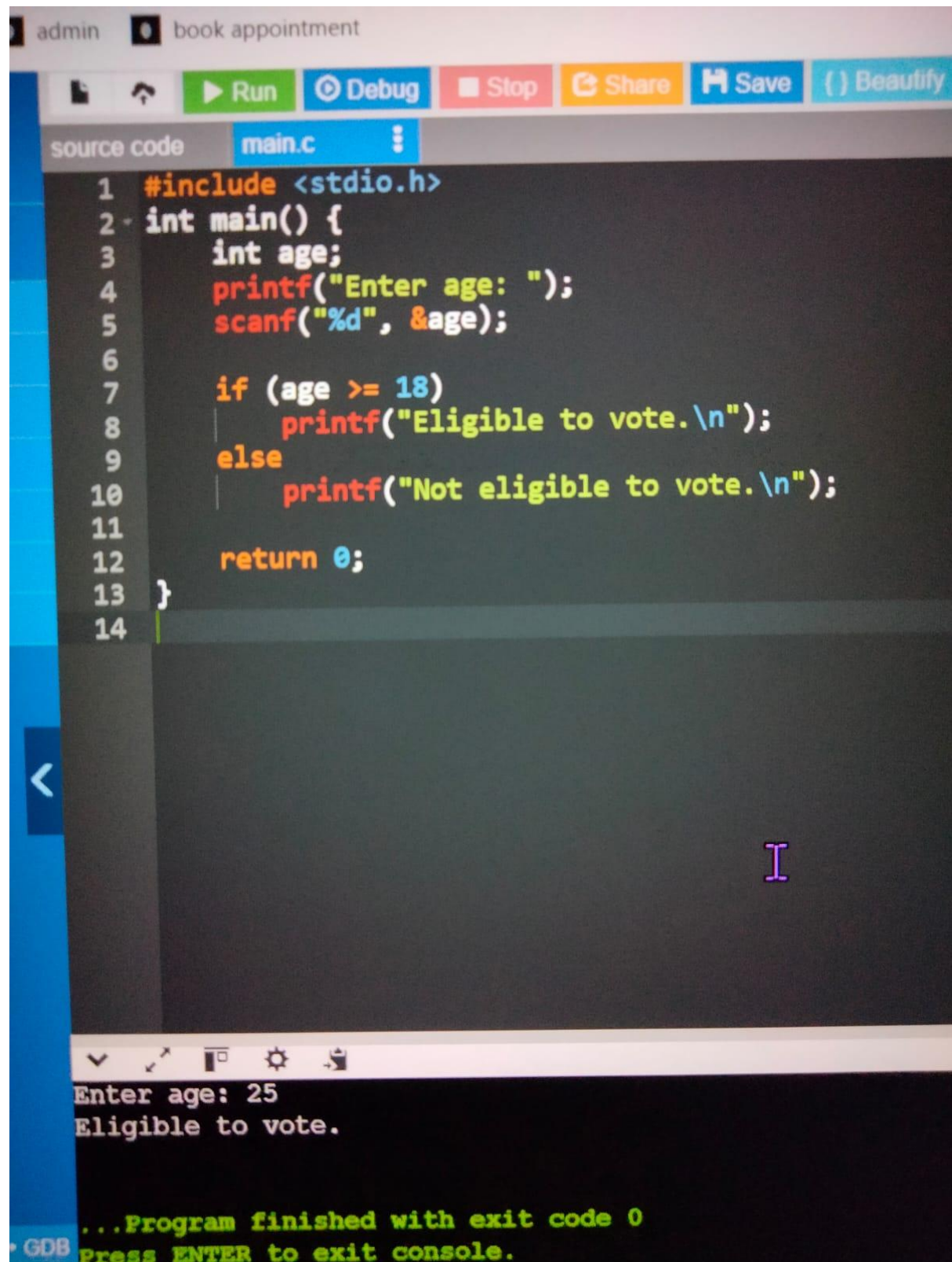
```
1 #include <stdio.h>
2 int main() {
3     int a, b;
4     printf("Enter two numbers: ");
5     scanf("%d %d", &a, &b);
6
7     if (a == b)
8         printf("The numbers are equal.\n");
9     else if (a > b)
10        printf("%d is greater than %d.\n", a, b);
11    else
12        printf("%d is less than %d.\n", a, b);
13
14    return 0;
15 }
16
17
```

Enter two numbers: 20 45
20 is less than 45.

...Program finished with exit code 0
Press ENTER to exit console.

12-Eligibility for Voting:

Determine whether a person is eligible to vote based on their age (age must be greater than or equal to 18).



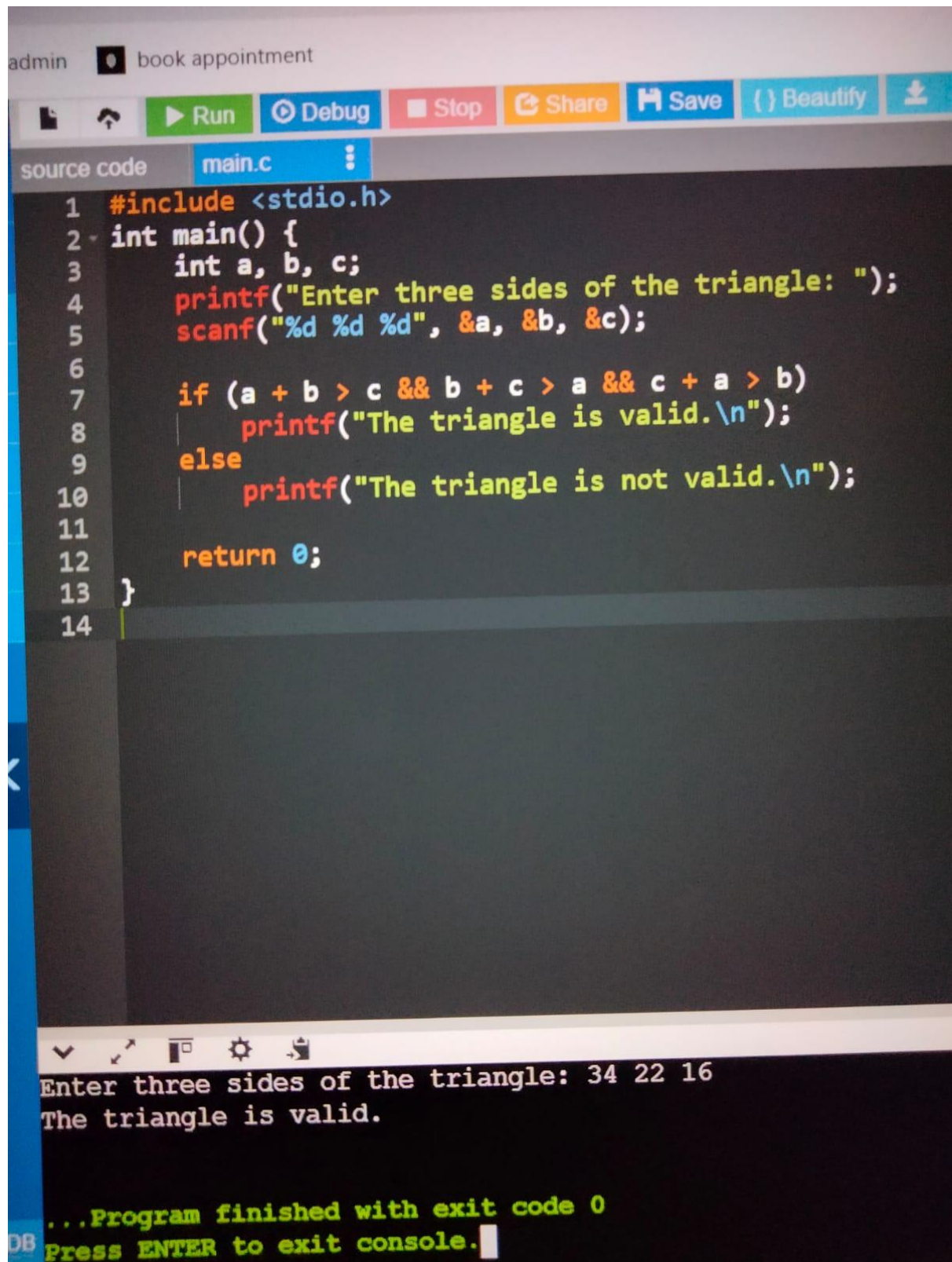
The image shows a screenshot of a code editor with a dark theme. At the top, there are tabs for 'admin' and 'book appointment'. Below the tabs is a toolbar with buttons for 'Run', 'Debug', 'Stop', 'Share', 'Save', and 'Beautify'. The 'source code' tab is active, showing a file named 'main.c'. The code is as follows:

```
1 #include <stdio.h>
2 int main() {
3     int age;
4     printf("Enter age: ");
5     scanf("%d", &age);
6
7     if (age >= 18)
8         printf("Eligible to vote.\n");
9     else
10        printf("Not eligible to vote.\n");
11
12    return 0;
13 }
14
```

Below the code editor, there is a console window. It shows the output of the program: 'Enter age: 25' followed by 'Eligible to vote.'. At the bottom of the console, it says '...Program finished with exit code 0' and 'Press ENTER to exit console.'.

13-Triangle Validity Check:

Given three sides of a triangle, use relational operators to check if the triangle is valid (the sum of any two sides must be greater than the third side).

A screenshot of a code editor window showing a C program for triangle validity check. The editor has a dark theme with a toolbar at the top containing buttons for Run, Debug, Stop, Share, Save, and Beautify. The source code is in a file named 'main.c'. The code includes <stdio.h>, defines a main function, declares variables a, b, and c, prompts the user to enter three sides, reads the input, and uses an if statement with relational and logical operators to check if the triangle is valid. The console output shows the user entering '34 22 16' and the program outputting 'The triangle is valid.' followed by a message that the program finished with exit code 0 and a prompt to press ENTER to exit the console.

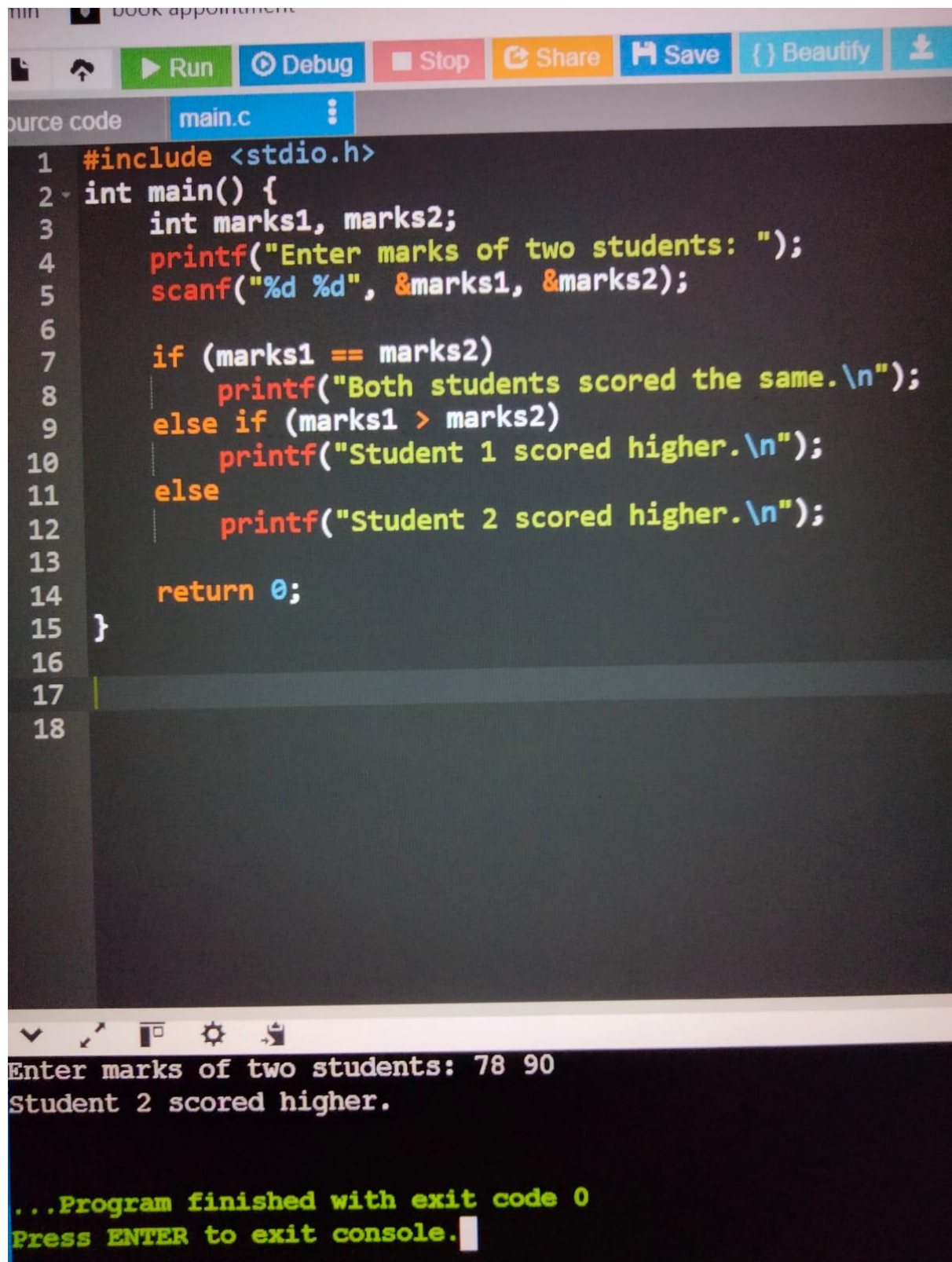
```
1 #include <stdio.h>
2 int main() {
3     int a, b, c;
4     printf("Enter three sides of the triangle: ");
5     scanf("%d %d %d", &a, &b, &c);
6
7     if (a + b > c && b + c > a && c + a > b)
8         printf("The triangle is valid.\n");
9     else
10        printf("The triangle is not valid.\n");
11
12    return 0;
13 }
14
```

Enter three sides of the triangle: 34 22 16
The triangle is valid.

...Program finished with exit code 0
Press ENTER to exit console.

14-Student Grade Comparison:

Compare the marks of two students to determine who scored higher, or if they have the same marks.

The image shows a screenshot of a code editor with a dark theme. At the top, there is a toolbar with buttons for 'Run' (green), 'Debug' (blue), 'Stop' (red), 'Share' (orange), 'Save' (blue), and 'Beautify' (light blue). Below the toolbar, the file name 'main.c' is visible. The code is written in C and uses syntax highlighting. It includes a header file, declares two integer variables, prompts the user for input, and uses an if-else statement to compare the marks. The console output at the bottom shows the program's execution with the input '78 90' and the resulting message 'Student 2 scored higher.'.

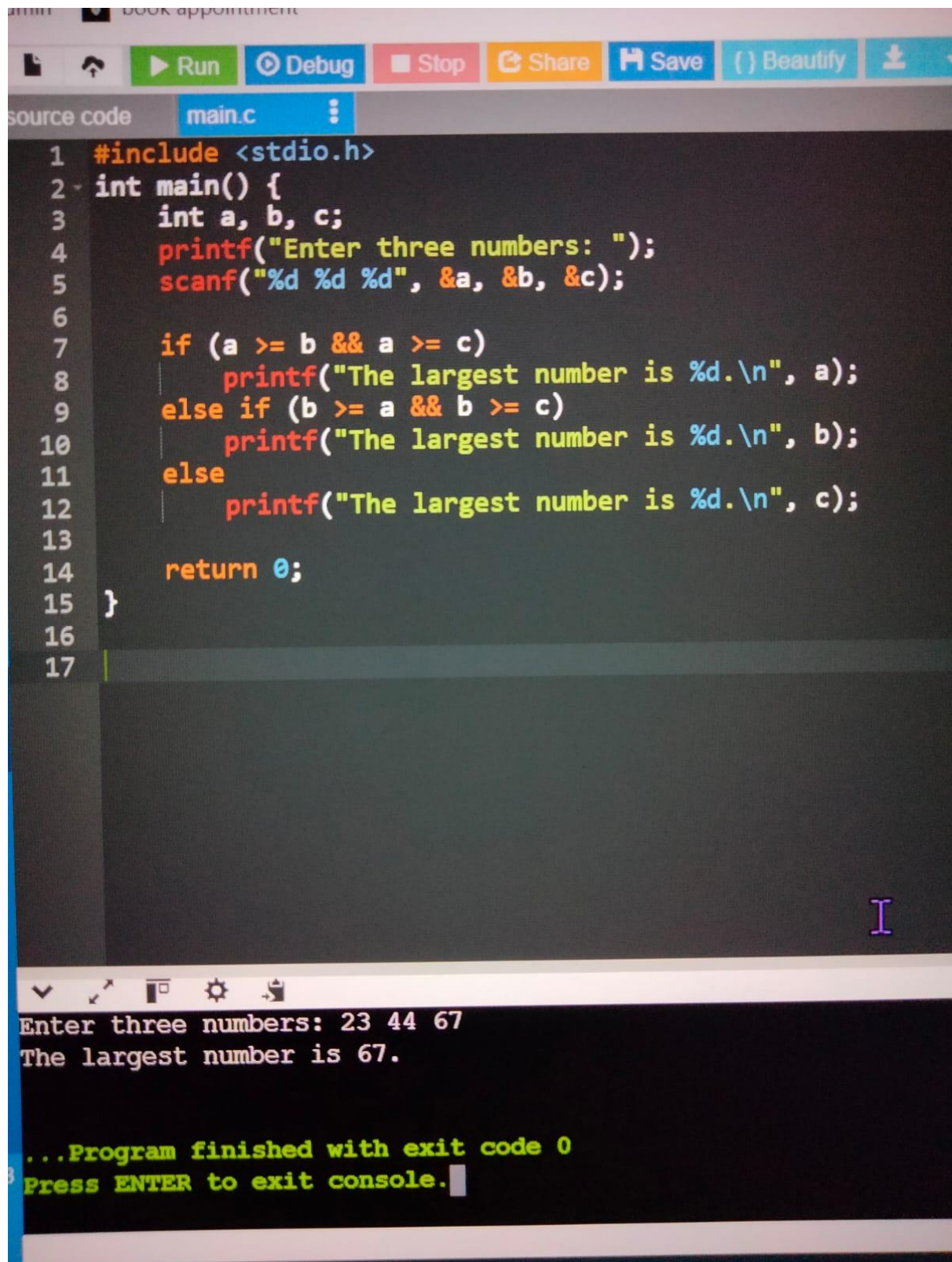
```
1 #include <stdio.h>
2 int main() {
3     int marks1, marks2;
4     printf("Enter marks of two students: ");
5     scanf("%d %d", &marks1, &marks2);
6
7     if (marks1 == marks2)
8         printf("Both students scored the same.\n");
9     else if (marks1 > marks2)
10        printf("Student 1 scored higher.\n");
11    else
12        printf("Student 2 scored higher.\n");
13
14    return 0;
15 }
16
17
18
```

Enter marks of two students: 78 90
Student 2 scored higher.

...Program finished with exit code 0
Press ENTER to exit console.

15-Find the Largest of Three Numbers:

Write a program to compare three numbers and determine the largest number using relational operators.



The image shows a screenshot of a code editor with a dark theme. At the top, there is a toolbar with buttons for 'Run', 'Debug', 'Stop', 'Share', 'Save', and 'Beautify'. Below the toolbar, the file name 'main.c' is visible. The code is written in C and is as follows:

```
1 #include <stdio.h>
2 int main() {
3     int a, b, c;
4     printf("Enter three numbers: ");
5     scanf("%d %d %d", &a, &b, &c);
6
7     if (a >= b && a >= c)
8         printf("The largest number is %d.\n", a);
9     else if (b >= a && b >= c)
10        printf("The largest number is %d.\n", b);
11    else
12        printf("The largest number is %d.\n", c);
13
14    return 0;
15 }
16
17
```

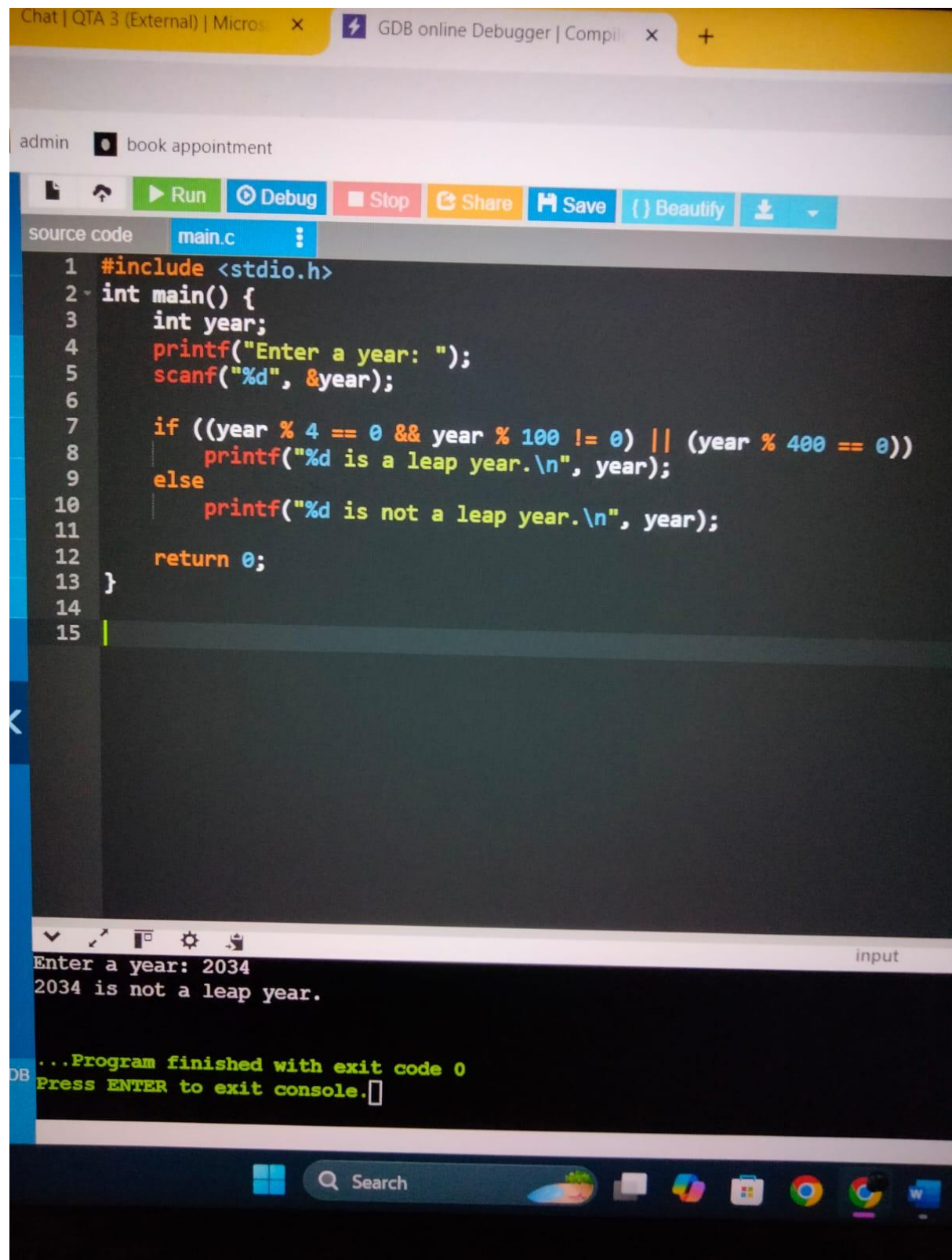
Below the code editor, there is a console window. It shows the output of the program:

```
Enter three numbers: 23 44 67
The largest number is 67.

...Program finished with exit code 0
Press ENTER to exit console.
```

16-Leap Year Check:

Use relational operators to determine if a given year is a leap year (divisible by 4 but not by 100 unless divisible by 400).



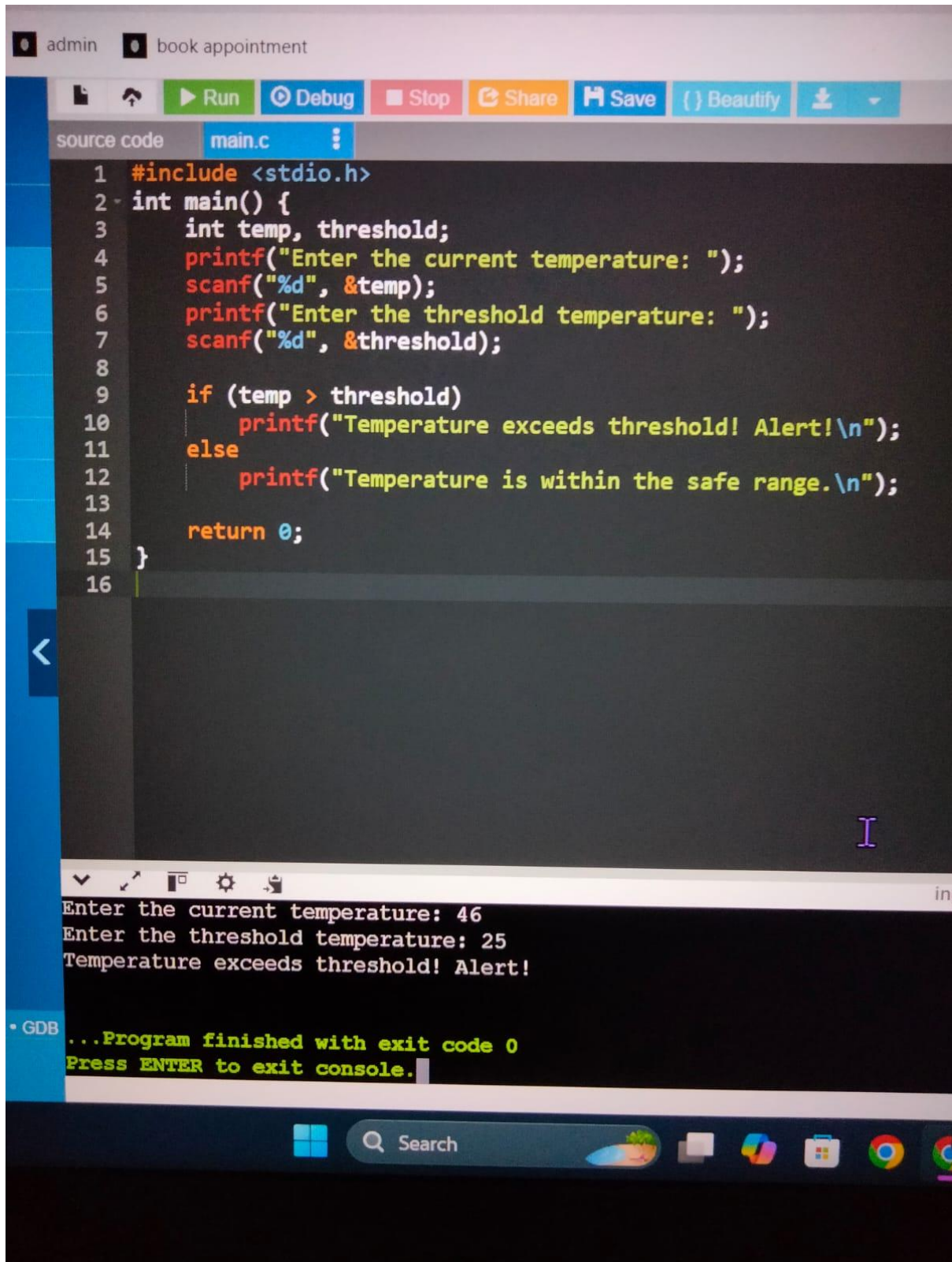
The screenshot displays a web-based GDB online Debugger interface. The browser tabs at the top include 'Chat | QTA 3 (External) | Micros...' and 'GDB online Debugger | Compil...'. The interface shows a source code editor for a file named 'main.c'. The code is as follows:

```
1 #include <stdio.h>
2 int main() {
3     int year;
4     printf("Enter a year: ");
5     scanf("%d", &year);
6
7     if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0))
8         printf("%d is a leap year.\n", year);
9     else
10        printf("%d is not a leap year.\n", year);
11
12    return 0;
13 }
14
15
```

Below the code editor is a console window. It shows the program's execution: it prompts 'Enter a year: 2034', and the user has entered '2034'. The program outputs '2034 is not a leap year.'. At the bottom of the console, it says '...Program finished with exit code 0' and 'Press ENTER to exit console.'.

17-Temperature Alert:

Write a program to check if the temperature exceeds a threshold value (e.g., greater than 40 degrees Celsius) and display an alert message.

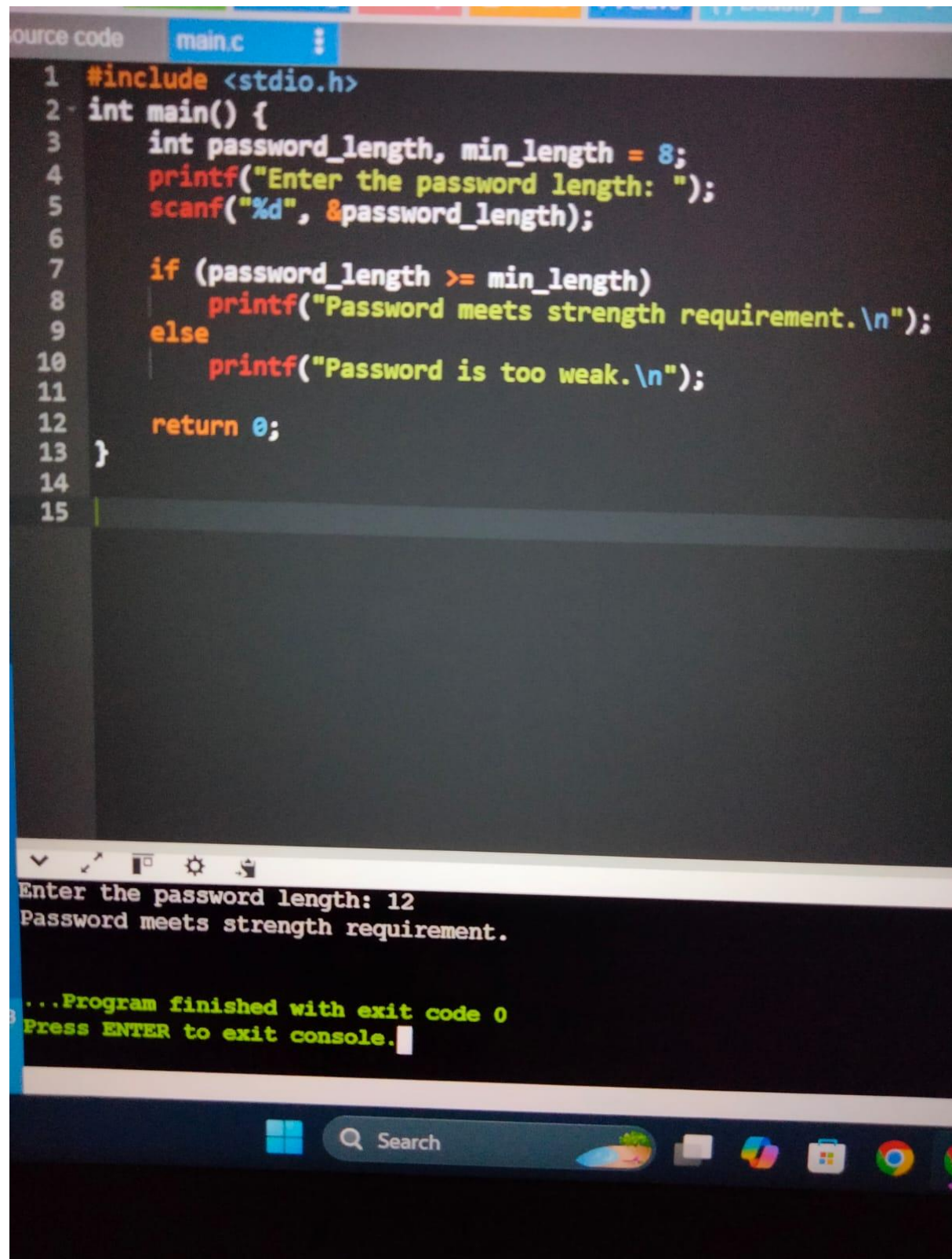
The image shows a screenshot of a code editor window with a dark theme. At the top, there are tabs for 'admin' and 'book appointment'. Below the tabs is a toolbar with buttons for 'Run', 'Debug', 'Stop', 'Share', 'Save', 'Beautify', and a download icon. The main editor area shows a C program named 'main.c'. The code is as follows:

```
1 #include <stdio.h>
2 int main() {
3     int temp, threshold;
4     printf("Enter the current temperature: ");
5     scanf("%d", &temp);
6     printf("Enter the threshold temperature: ");
7     scanf("%d", &threshold);
8
9     if (temp > threshold)
10        printf("Temperature exceeds threshold! Alert!\n");
11    else
12        printf("Temperature is within the safe range.\n");
13
14    return 0;
15 }
16
```

Below the code editor is a terminal window. It shows the program's execution: 'Enter the current temperature: 46', 'Enter the threshold temperature: 25', and 'Temperature exceeds threshold! Alert!'. At the bottom, a GDB window shows the message '...Program finished with exit code 0' and 'Press ENTER to exit console.' The Windows taskbar is visible at the very bottom of the screen.

18-Password Strength Validation:

Given the length of a password, check if it meets the minimum requirement of 8 characters using relational operators.

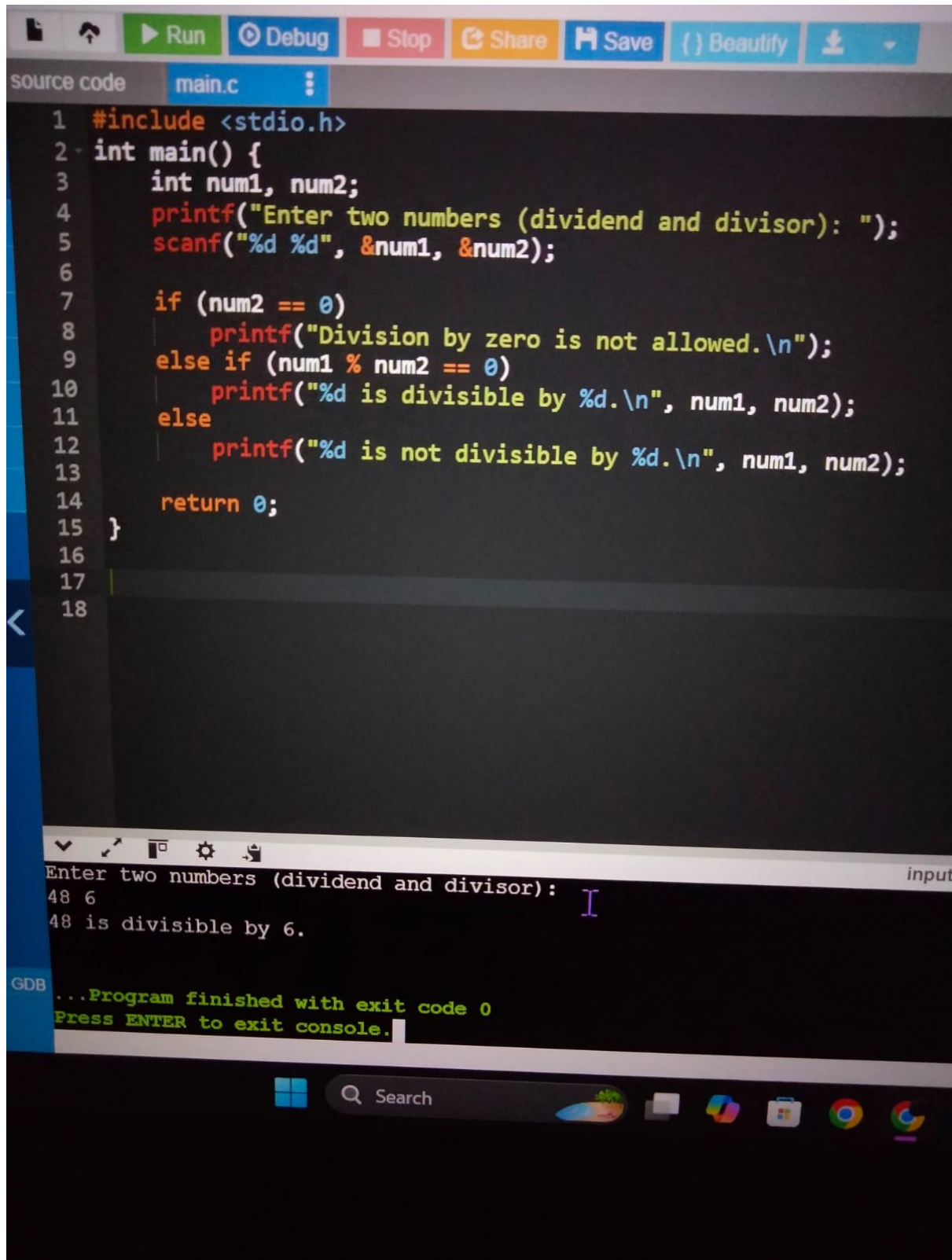
The image shows a code editor window with a file named 'main.c'. The code is a C program that prompts the user for a password length and checks if it is at least 8 characters long. The code is as follows:

```
1 #include <stdio.h>
2 int main() {
3     int password_length, min_length = 8;
4     printf("Enter the password length: ");
5     scanf("%d", &password_length);
6
7     if (password_length >= min_length)
8         printf("Password meets strength requirement.\n");
9     else
10        printf("Password is too weak.\n");
11
12    return 0;
13 }
14
15
```

Below the code editor, there is a terminal window showing the program's execution. It prompts 'Enter the password length: 12' and outputs 'Password meets strength requirement.'. At the bottom, it says '...Program finished with exit code 0' and 'Press ENTER to exit console.' The Windows taskbar is visible at the bottom of the screen.

19-Check Divisibility:

Write a program to determine if one number is divisible by another using relational operators.



The image shows a screenshot of a code editor with a dark theme. At the top, there is a toolbar with buttons for Run, Debug, Stop, Share, Save, Beautify, and a download icon. Below the toolbar, the file name 'main.c' is displayed. The source code is as follows:

```
1 #include <stdio.h>
2 int main() {
3     int num1, num2;
4     printf("Enter two numbers (dividend and divisor): ");
5     scanf("%d %d", &num1, &num2);
6
7     if (num2 == 0)
8         printf("Division by zero is not allowed.\n");
9     else if (num1 % num2 == 0)
10        printf("%d is divisible by %d.\n", num1, num2);
11    else
12        printf("%d is not divisible by %d.\n", num1, num2);
13
14    return 0;
15 }
```

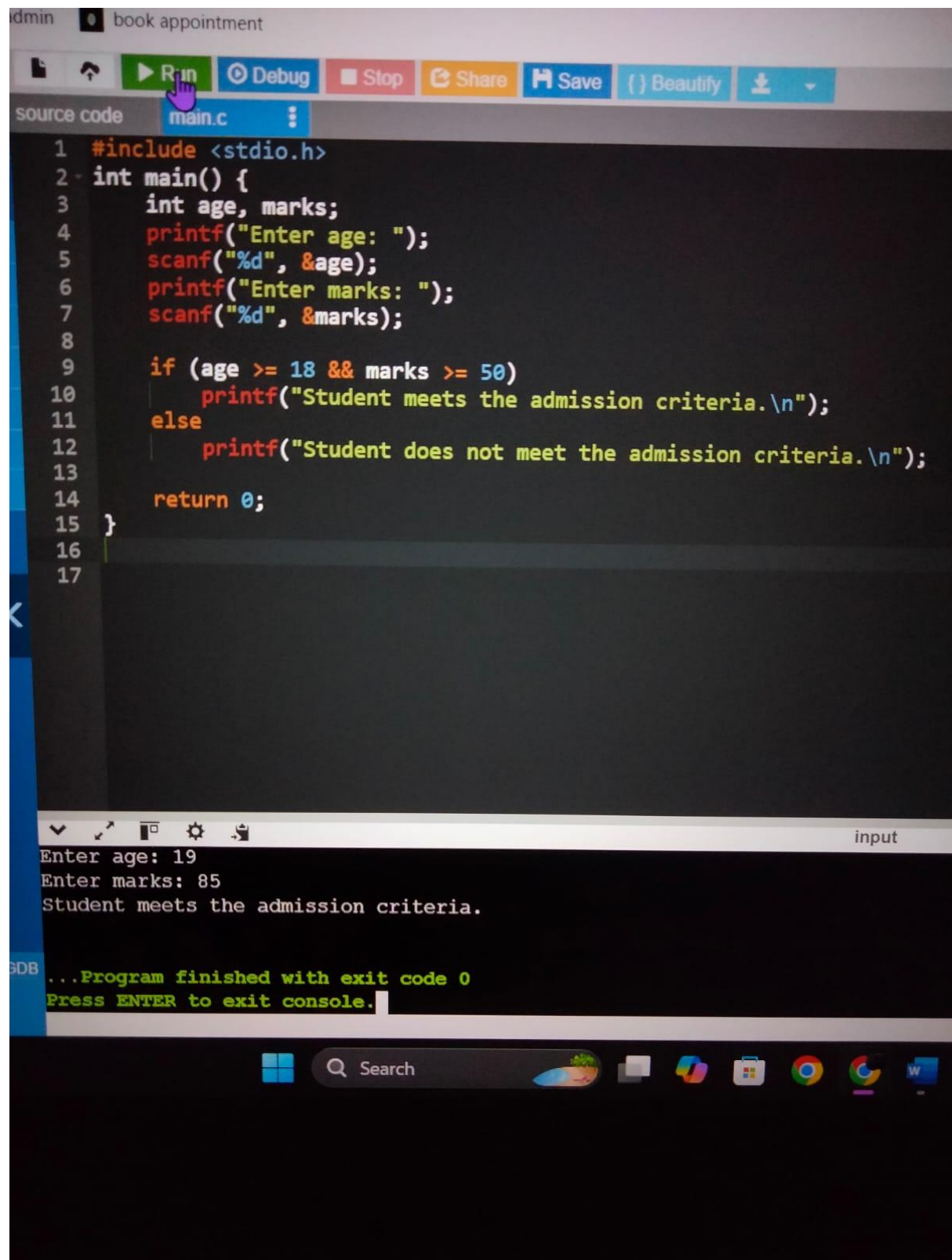
Below the code editor, the program's output is shown. It prompts the user to enter two numbers, and the user enters '48 6'. The program outputs '48 is divisible by 6.' and then '...Program finished with exit code 0'. The GDB prompt 'Press ENTER to exit console.' is also visible.

```
Enter two numbers (dividend and divisor): 48 6
48 is divisible by 6.
...Program finished with exit code 0
Press ENTER to exit console.
```

The Windows taskbar is visible at the bottom of the screen, showing the Start button, a search bar, and several application icons.

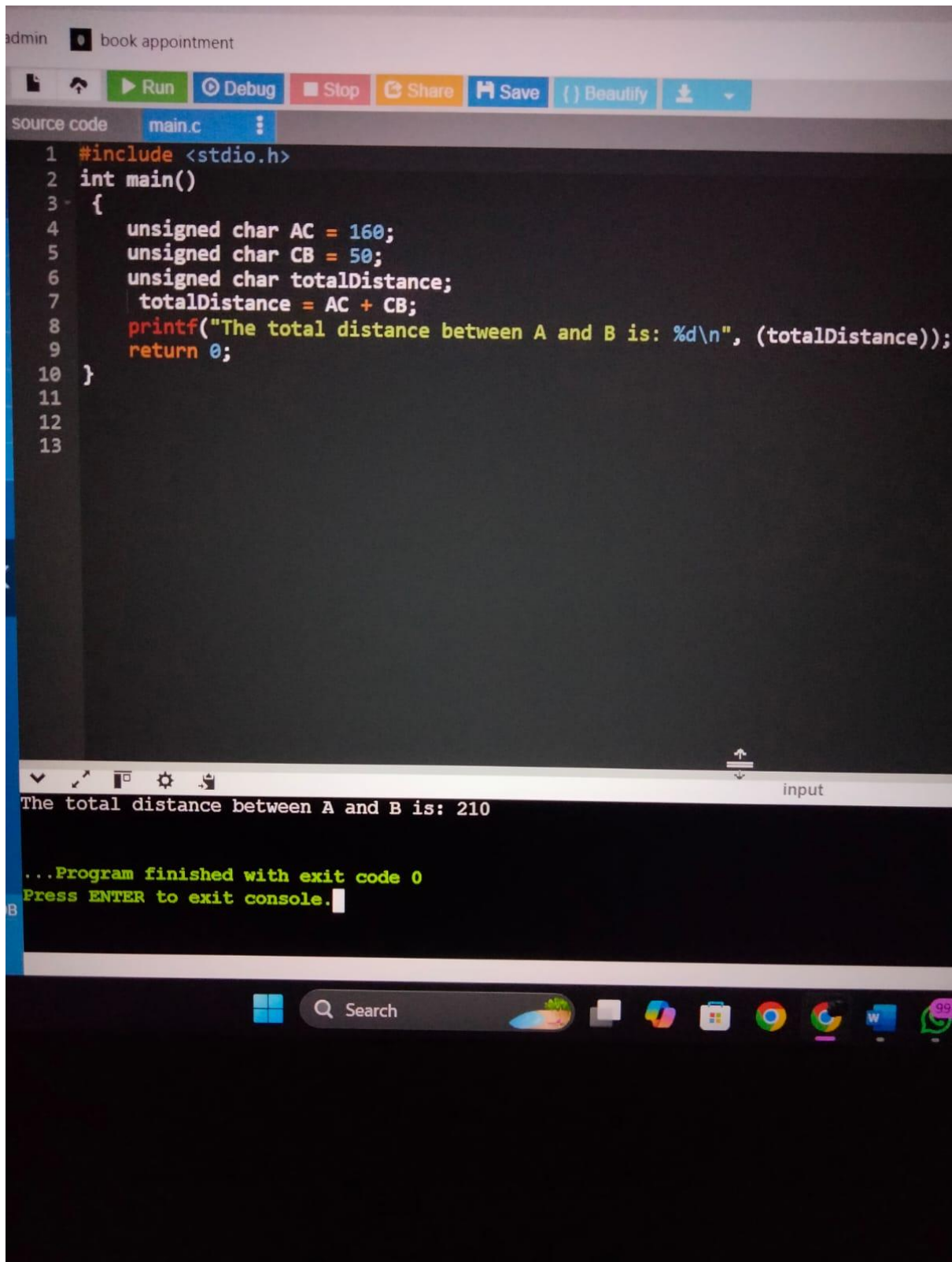
20-Admission Criteria:

Check if a student meets the criteria for admission to a course based on their age (greater than or equal to 18) and marks (greater than or equal to 50)



```
admin book appointment
Run Debug Stop Share Save {} Beautify
source code main.c
1 #include <stdio.h>
2 int main() {
3     int age, marks;
4     printf("Enter age: ");
5     scanf("%d", &age);
6     printf("Enter marks: ");
7     scanf("%d", &marks);
8
9     if (age >= 18 && marks >= 50)
10        printf("Student meets the admission criteria.\n");
11    else
12        printf("Student does not meet the admission criteria.\n");
13
14    return 0;
15 }
16
17
input
Enter age: 19
Enter marks: 85
Student meets the admission criteria.
...Program finished with exit code 0
Press ENTER to exit console.
```


21- Calculate the total distance between a and b were ac=160 and cb=50



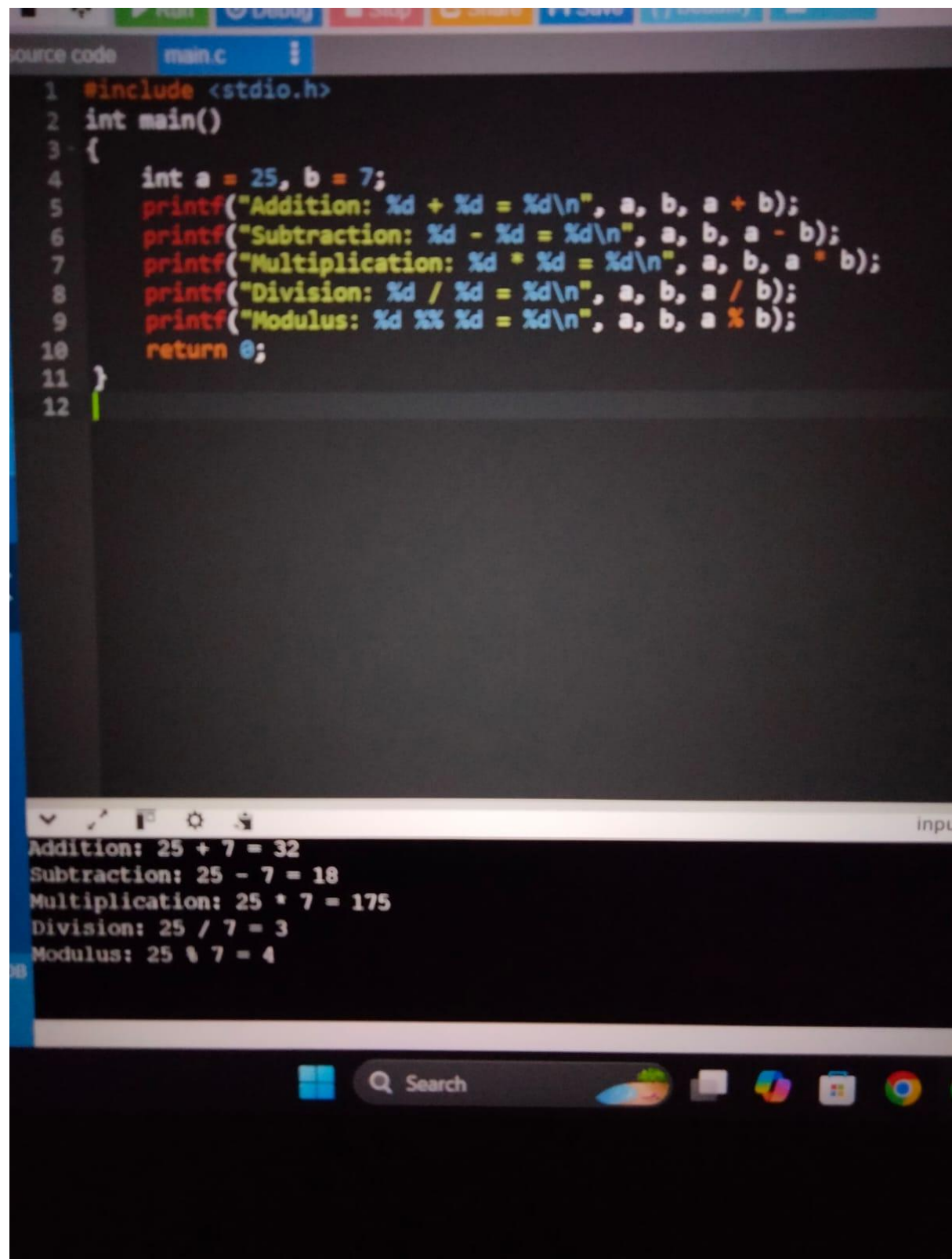
The image shows a screenshot of a code editor window with a dark theme. The editor displays a C program in a file named `main.c`. The code defines two unsigned char variables, `AC` and `CB`, with values 160 and 50 respectively. It then calculates their sum and prints it using `printf`. The output of the program is shown in a console window below the editor, displaying the message "The total distance between A and B is: 210". The console also shows the program finished with exit code 0 and a prompt to press ENTER to exit the console. The Windows taskbar is visible at the bottom of the screen.

```
1 #include <stdio.h>
2 int main()
3 {
4     unsigned char AC = 160;
5     unsigned char CB = 50;
6     unsigned char totalDistance;
7     totalDistance = AC + CB;
8     printf("The total distance between A and B is: %d\n", (totalDistance));
9     return 0;
10 }
11
12
13
```

The total distance between A and B is: 210

...Program finished with exit code 0
Press ENTER to exit console.

22-Write a program for all the usage of arithmetic operators



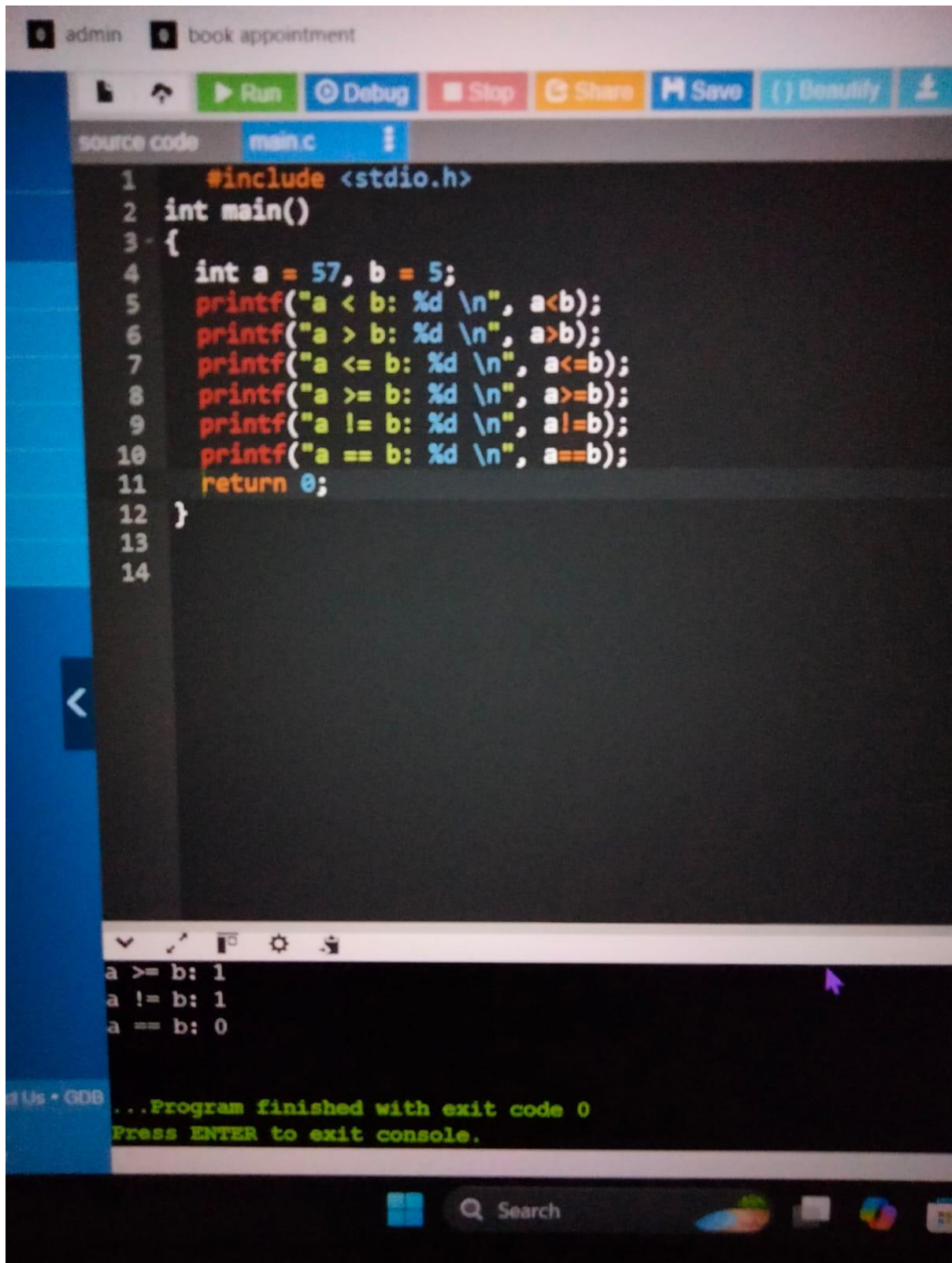
The image shows a screenshot of a code editor window with a dark theme. The editor displays a C program that uses the `printf` function to demonstrate the five basic arithmetic operators: addition, subtraction, multiplication, division, and modulus. The variables `a` and `b` are initialized to 25 and 7, respectively. The program is saved as `main.c`. Below the code editor, the output of the program is visible, showing the results of each operation. The Windows taskbar is visible at the bottom of the screen.

```
1 #include <stdio.h>
2 int main()
3 {
4     int a = 25, b = 7;
5     printf("Addition: %d + %d = %d\n", a, b, a + b);
6     printf("Subtraction: %d - %d = %d\n", a, b, a - b);
7     printf("Multiplication: %d * %d = %d\n", a, b, a * b);
8     printf("Division: %d / %d = %d\n", a, b, a / b);
9     printf("Modulus: %d %% %d = %d\n", a, b, a % b);
10    return 0;
11 }
12
```

Output:

```
Addition: 25 + 7 = 32
Subtraction: 25 - 7 = 18
Multiplication: 25 * 7 = 175
Division: 25 / 7 = 3
Modulus: 25 % 7 = 4
```


23- Relational Operators



The image shows a screenshot of a code editor window with a dark theme. The editor displays a C program named `main.c` that uses various relational operators to compare two integers, `a` and `b`. The program is as follows:

```
1  #include <stdio.h>
2  int main()
3  {
4      int a = 57, b = 5;
5      printf("a < b: %d \n", a<b);
6      printf("a > b: %d \n", a>b);
7      printf("a <= b: %d \n", a<=b);
8      printf("a >= b: %d \n", a>=b);
9      printf("a != b: %d \n", a!=b);
10     printf("a == b: %d \n", a==b);
11     return 0;
12 }
13
14
```

Below the code editor, the output of the program is visible in a console window. It shows the results of the comparisons for `a = 57` and `b = 5`:

```
a >= b: 1
a != b: 1
a == b: 0
```

At the bottom of the console, a message indicates that the program finished successfully:

```
...Program finished with exit code 0
Press ENTER to exit console.
```

The Windows taskbar is visible at the bottom of the screen, showing the Start button, a search bar, and several application icons.