1- Write a program that prompts the user to enter a number, stores it in an integer variable, and then prints the entered number.

اكتب برنامجًا يطلب من المستخدم إدخال رقم، ويخزنه في متغير عدد صحيح، ثم يطبع الرقم الذي تم إدخاله.

Input

```
Please, Enter a number: 5
```

Output

```
Number is 5
```

Solution

```
// www.gammal.tech
#include <iostream>
using namespace std;
int main() {
   int num;
   cout << "Please, Enter a number: ";
   cin >> num;
   cout << "Number is " << num << endl;
   return 0;
}</pre>
```

2- Create a program that takes a decimal number as input, stores it in a float variable, and prints the entered number.

قم بإنشاء برنامج يأخذ float كمدخل، ويخزنه في متغير float ، ويطبع الرقم الذي تم إدخاله.

Input

```
Please, Enter a number: 5.5
```

Output

```
Number is 5.5
```

Solution

```
// www.gammal.tech

#include <iostream>
using namespace std;

int main() {
    float num;
    cout << "Please, Enter a number: ";
    cin >> num;
    cout << "Number is " << num << endl;
    return 0;
}</pre>
```

3- Write a program that prompts the user to enter a character, stores it in a char variable, and prints the entered character.

اكتب برنامجًا يطلب من المستخدم إدخال حرف، ويخزنه في متغير char، ويطبع الحرف الذي تم إدخاله.

Input

```
Please, Enter a character: A
```

Output

The character is A

Solution

```
// www.gammal.tech

#include <iostream>
using namespace std;

int main() {
    char character;
    cout << "Please, Enter a character: ";
    cin >> character;
    cout << "The character is " << character << endl;
    return 0;
}</pre>
```

4- Write a program that takes a boolean value (1 or 0) as input, stores it in a bool variable, and prints the entered boolean value.

```
اكتب برنامجًا يأخذ قيمة منطقية (1 أو 0) كمدخلات، ويخزنها في متغير منطقي، ويطبع القيمة المنطقية المدخلة.
```

Input

```
Please, Enter a boolean value (1 or 0): 1
```

Output

The boolean value is 1

Solution

```
// www.gammal.tech
#include <iostream>
using namespace std;

int main() {
    bool flag;
    cout << "Please, Enter a boolean value (1 or 0): ";
    cin >> flag;
    cout << "The boolean value is " << flag << endl;
    return 0;
}</pre>
```

5- Create a program that takes an integer as input, multiplies it by 2, and prints the result.

قم بإنشاء برنامج يأخذ عددًا صحيحًا كمدخل، ويضربه في 2، ويطبع النتيجة.

Input

```
Enter an integer: 6
```

Output

```
Twice of the entered integer is: 12
```

Solution

```
// www.gammal.tech

#include <iostream>
using namespace std;

int main() {
    int num;
    cout << "Enter an integer: ";
    cin >> num;
    cout << "Twice of the entered integer is: " << num * 2 << endl;
    return 0;
}</pre>
```

6- Write a program that asks the user for two floating-point numbers, adds them, and prints the result.

اكتب برنامجًا يطلب من المستخدم two floating-point ، ثم يجمعهما ويطبع النتيجة.

Input

```
Enter two floating-point numbers: 8.3 6.9
```

Output

```
Sum of the entered numbers is: 15.2
```

Solution

```
// www.gammal.tech

#include <iostream>
using namespace std;

int main() {
    float num1, num2;
    cout << "Enter two floating-point numbers: ";
    cin >> num1 >> num2;
    cout << "Sum of the entered numbers is: " << num1 + num2 << endl;
    return 0;
}</pre>
```

7- Create a program that takes a character as input, converts it to its ASCII value, and prints the result.

قم بإنشاء برنامج يأخذ حرفًا كمدخل، ويحوله إلى قيمة ASCII الخاصة به، ويطبع النتيجة.

Input

```
Enter a character: G
```

ASCII value of the entered character is: 71

Solution

```
// www.gammal.tech

#include <iostream>
using namespace std;

int main() {
    char character;
    cout << "Enter a character: ";
    cin >> character;
    cout << "ASCII value of the entered character is: " << int(character) << endl;
    return 0;
}</pre>
```

8- Write a program that asks the user for their age, stores it in an integer variable, and then prints a message based on whether they are eligible to vote (age 18 or older).

```
اكتب برنامجًا يسأل المستخدم عن عمره، ويخزنه في متغير عدد صحيح، ثم يطبع رسالة بناءً على ما إذا كان مؤهلاً للتصويت (العمر 18 عامًا أو أكبر).
```

Input

```
Enter your age: 21
```

Output

```
You aré eligible to vote!
```

Solution

```
// www.gammal.tech
#include <iostream>
using namespace std;
int main() {
   int age;
   cout << "Enter your age: ";
   cin >> age;

   if (age >= 18) {
      cout << "You are eligible to vote!" << endl;
   } else {
      cout << "You are not eligible to vote yet." << endl;
   }
   return 0;
}</pre>
```

9- Create a program that asks the user for their birth year and prints a message.

أنشئ برنامجًا يسأل المستخدم عن سنة ميلاده ويطبع رسالة.

Input

Enter your birth year: 2002

Output

You were born in the year 2002.

Solution

```
// www.gammal.tech
#include <iostream>
int main() {
    using namespace std;
    cout << "Enter your birth year: ";
    int birthYear;
    cin >> birthYear;
    cout << "You were born in the year " << birthYear << "." << endl;
    return 0;
}</pre>
```

10- Write a program that takes two integers as input and prints their difference.

اكتب برنامجا يأخذ عددين صحيحين كمدخلات ويطبع الفرق بينهما.

Input

```
Enter two integers: 5 7
```

Output

```
Difference: -2
```

Solution

```
// www.gammal.tech

#include <iostream>
int main() {
    using namespace std;
    cout << "Enter two integers: ";
    int num1, num2;
    cin >> num1 >> num2;
    cout << "Difference: " << num1 - num2 << endl;
    return 0;
}</pre>
```