

Write a C++ program to print all numbers between a and b (a and b inclusive) using for loops.

for: باستخدام حلقة (a و b شاملًا) a و b لطباعة جميع الأرقام بين C++ برنامج

```
#include <iostream>

using namespace std;

int main() {
    int a, b;
    cout << "Enter two numbers (a and b): ";
    cin >> a >> b;

    for (int i = a; i <= b; i++) {
        cout << i << " ";
    }

    return 0;
}
```

2- write a simple C++ program to find the mean value of a set of numbers

بسيط لحساب القيمة المتوسطة لمجموعة من الأرقام من C++ برنامج

```
#include <iostream>

using namespace std;

int main() {
    int n;
    double sum = 0.0;
    double num;

    cout << "Enter the number of elements: ";
    cin >> n;

    cout << "Enter " << n << " numbers: ";
    for (int i = 0; i < n; i++) {
        cin >> num;
        sum += num;
    }

    double mean = sum / n;
    cout << "Mean value: " << mean << endl;

    return 0;
}
```

1- write a Program to find the square root of 10 number

برنامج لإيجاد الجذر التربيعي لعشرة أعداد:

```
#include <iostream>
#include <cmath>

using namespace std;

int main() { double sqrtResult;
  for (int i = 1; i <= 10; i++) {
    sqrtResult = sqrt(i);
    cout << "Square root of " << i << ": " << sqrtResult << endl;
  }
  return 0;
}
```

4- write a Program to Find the Number of Vowels, Consonants characters in the range from A-Z

برنامج لإيجاد عدد الحروف الصوتية والساكنة في النطاق من A إلى Z:

```
#include <iostream>

using namespace std;

int main() {
  int vowels = 0;
  int consonants = 0;

  for (char ch = 'A'; ch <= 'Z'; ch++) {
    if (ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch == 'U')
      vowels++;
    else
      consonants++;
  }

  cout << "Number of vowels: " << vowels << endl;
  cout << "Number of consonants: " << consonants << endl;

  return 0;
}
```

5- write a program to find the factorial of a given no

برنامج لإيجاد مفاكوك رقم معين:

```
#include <iostream>

using namespace std;

int main() {
    int number;
    cout << "Enter a number: ";
    cin >> number;

    int factorial = 1;
    for (int i = 1; i <= number; i++) {
        factorial *= i;
    }

    cout << "Factorial of " << number << ": " << factorial << endl;

    return 0;
}
```

6- write a program to find the power of a no given by user with the value of its power

برنامج لإيجاد قوة رقم معين بواسطة القيمة المدخلة من المستخدم:

```
#include <iostream>
#include <cmath>

using namespace std;

int main() {int i;
    int pow=1;
    int base, exponent;
    cout << "Enter the base number: ";
    cin >> base;

    cout << "Enter the exponent value: ";
    cin >> exponent;
    for(i=1;i<= exponent;i++)
        pow*= base;
    cout << base << " raised to the power of " << exponent << ": " <<pow << endl;

    return 0;
}
```