

Program to check the given number is pallindrom or not

```
#include <iostream>
using namespace std;

int main()
{
    int n, num, digit, rev = 0;

    cout << "Enter a positive number: ";
    cin >> num;

    n = num;

    do
    {
        digit = num % 10;
        rev = (rev * 10) + digit;
        num = num / 10;
    } while (num != 0);

    cout << " The reverse of the number is: " << rev << endl;

    if (n == rev)
        cout << " The number is a palindrome.";
    else
        cout << " The number is not a palindrome.";

    return 0;
}
```

Display Prime Numbers Between two Intervals

```
#include <iostream>
using namespace std;

int main() {

    int low, high, i;
    bool is_prime = true;

    cout << "Enter two numbers (intervals): ";
    cin >> low >> high;

    cout << "\nPrime numbers between " << low << " and " << high << " are: " <<
endl;
```

```

while (low < high) {
    is_prime = true;

    // 0 and 1 are not prime numbers
    if (low == 0 || low == 1) {
        is_prime = false;
    }

    for (i = 2; i <= low/2; ++i) {
        if (low % i == 0) {
            is_prime = false;
            break;
        }
    }

    if (is_prime)
        cout << low << ", ";

    ++low;
}

return 0;
}

```

Display all Factors of a Number

```

#include <iostream>
using namespace std;

int main() {
    int n, i;

    cout << "Enter a positive integer: ";
    cin >> n;

    cout << "Factors of " << n << " are: ";
    for(i = 1; i <= n; ++i) {
        if(n % i == 0)
            cout << i << " ";
    }

    return 0;
}

```

Simple Calculator using switch statement

```

# include <iostream>
using namespace std;

int main() {

```

```

char op;
float num1, num2;

cout << "Enter operator: +, -, *, /: ";
cin >> op;

cout << "Enter two operands: ";
cin >> num1 >> num2;

switch(op) {

    case '+':
        cout << num1 << " + " << num2 << " = " << num1 + num2;
        break;

    case '-':
        cout << num1 << " - " << num2 << " = " << num1 - num2;
        break;

    case '*':
        cout << num1 << " * " << num2 << " = " << num1 * num2;
        break;

    case '/':
        cout << num1 << " / " << num2 << " = " << num1 / num2;
        break;

    default:
        // If the operator is other than +, -, * or /, error message is shown
        cout << "Error! operator is not correct";
        break;
}

return 0;
}

```

Program to display the following format

```

*
* *
* * *
* * * *
* * * * *

```

Source Code

```

#include <iostream>
using namespace std;

int main() {

```

```
int rows;

cout << "Enter number of rows: ";
cin >> rows;

for(int i = 1; i <= rows; ++i) {
    for(int j = 1; j <= i; ++j) {
        cout << "* ";
    }
    cout << "\n";
}
return 0;
}
```