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;
}
```