TutorialKart

C++ Arithmetic Operations

C++ Arithmetic Operations

We can perform Arithmetic Operations in C++ on numbers using C++ Arithmetic Operators.

In this tutorial, we will learn about the list of Arithmetic Operators available in C++ programming language. We will also learn how to perform Arithmetic Operations, with the help of examples.

C+ Arithmetic Operators

Operator	Name	Example	Description
+	Addition	a + b	Returns sum of a and b.
–	Subtraction	a – b	Returns difference of b from a.
*	Multiplication	a * b	Returns product of a and b.
/	Division	a / b	Returns the quotient when a is divided by b.
%	Modular Division	a % b	Returns reminder when a is divided by b.
++	Increment	a++ or ++a	Increments the value of a by one.
—	Decrement	a– or –a	Decrements the value of a by one.

C++ Addition

`+` operator computes the addition of the two operands and returns the result.

C++ Program

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

int main() {
   int a = 12;
   int b = 7;

   int sum = a + b;

   cout << sum << endl;
}
```

Output

```
```

Learn more about C++ Addition.

C++ Subtraction

`-` operator computes the difference of right operand from left operand and returns the result.

C++ Program

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

int main() {
   int a = 12;
   int b = 7;

   int diff = a - b;

   cout << diff << endl;
}
```

Output

```
5
```

Learn more about C++ Subtraction.

C++ Multiplication

`*` operator computes the product of two operands and returns the result.

C++ Program

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

int main() {
   int a = 12;
   int b = 7;

   int product = a * b;

   cout << product << endl;
}
```

}
```

**Output**

```

```

Learn more about C++ Multiplication.

## C++ Division

`+` operator computes the division of first operand with second operand and returns the quotient.

**C++ Program**

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

int main() {
   int a = 16;
   int b = 7;

   int div = a / b;

   cout << div << endl;
}
```

**Output**

```
2
```

Learn more about C++ Division.

C++ Modular Division

`%` operator computes the division of the given operands and returns the reminder.

C++ Program

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

int main() {
   int a = 13;
   int b = 5;

   int modulo = a%b;

   cout << modulo;
```
```

```
}
```

Output

```
3
```

Learn more about C++ Modular Division.

C++ Increment

`++` operator increments the value of the operand by one.

C++ Program

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

int main() {
   int a = 12;
   ++a;
   cout << a << endl;
}
```

Output

```

```

Learn more about C++ Increment.

C++ Decrement

`++` operator decrements the value of the operand by one.

C++ Program

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

int main() {
   int a = 12;
   --a;
   cout << a << endl;
}
```

Output

Learn more about C++ Decrement.

Conclusion

In this C++ Tutorial, we learned what are Arithmetic Operators and what they can do, with the help of example C++ programs.