Solution Review: Arithmetic Operators

In this review: we give a detailed analysis of the solution to this exercise.

We'll cover the following ^

- Solution #1: Operator Precedence
  - Explanation
- Solution #2: Using the Entire Expression Directly
  - Explanation

Solution #1: Operator Precedence

```
ans <- 4 * 9
ans <- ans + 2
ans <- ans - 8
cat(ans)
```

Explanation

The given task here was to find the value of the equation
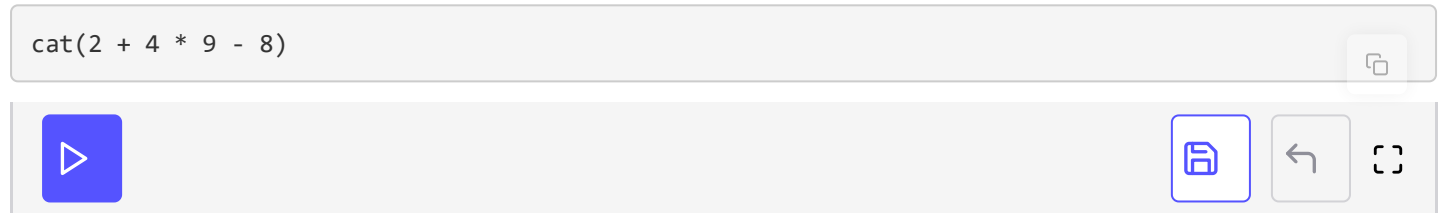
```
2 + 4 * 9 - 8
```

Mathematically, we need to find the value of the multiplying numbers first, keeping in mind **operator precedence**. So, we multiply 4 and 9 and save the value in the variable `ans`. Next, we perform addition. We can either perform subtraction or addition first, but we move from left to right: add 2 to `ans` and store in `ans`, then, subtract 8 from `ans`.

> Operator precedence determines which operator is performed first in an expression with more than one operators.

- `*`, `/` and `%` operators have equal precedence.

- `+` and `-` operators have equal precedence.

- `*`, `/` and `%` have higher precedence than `+` and `-`. The operator with higher precedence is executed first in the expression.

Solution #2: Using the Entire Expression Directly

```
cat(2 + 4 * 9 - 8)
```

Explanation

This is the simpler method, just find the value of the entire string and pass to `cat()` for printing. Here, **operator precedence** will be handled by R compiler itself.

Now, that we have an idea of **Arithmetic Operators** let's move on to **Relational Operators**.