

Solution: Fix the Code

This lesson provides a solution to the challenge given in the previous lesson.

WE'LL COVER THE FOLLOWING ^

- Solution
- Solution explanation

Solution

Here is a fixed version of the code that will swap the values of `a` and `b`.

```
import std.stdio;

void swap(ref int first, ref int second) {
    const int temp = first;
    first = second;
    second = temp;
}

void main() {
    int a = 1;
    int b = 2;

    swap(a, b);

    writeln("a = ",a);
    writeln("b = ",b);
}
```



Code to swap the values

Solution explanation

- **In line 3:**

```
void swap(ref int first, ref int second)
```

Originally the parameters of this function are value types that are passed as a copy from `main()`. Hence, only copies of arguments are swapped in the function.

To make the function swap the arguments, both of the parameters must be passed by reference. With that change, the variables in `main()` would be swapped.

Although not related to the original problem, also note that `temp` is specified as `const` as it is not changed in the function.

In the next lesson, we will explore lvalues and rvalues.