

# Solution: Swap Keys with Values of an Associative Array

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

## WE'LL COVER THE FOLLOWING ^

- Solution
- Solution explanation

## Solution #

Here is the code that will swap the keys with values of an associative array.

```
import std.stdio;

void Swap() {
    string[int] names = [ 1:"one", 7:"seven", 20:"twenty" ];

    int[string] values;

    foreach (key, value; names) {
        values[value] = key;
    }

    writeln(values["twenty"]);
}
```



Code to swap keys with values of an associative array

## Solution explanation #

- In line 6:

```
int[string] values;
```

The `int` type is used for the keys, and the `string` type is used for the values.

To have an associative array with a structure opposite to that of `names`, the types of the `key` and the `value` must be swapped. Hence, the new associative array must be defined as of type `int[string]`.

- **In line 8 and 9:**

```
foreach (key, value; names) {  
    values[value] = key;
```

These lines are iterating over the keys and the values of the original associative array while using keys as values and values as keys to populate the `values` table.

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In the next lesson, we will explore `switch` and `case` in the D language.