Solution: Sort and Reverse Elements of an Array

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

WE'LL COVER THE FOLLOWING

Solution

Here is the code that will sort and reverse elements of an array.

```
import std.stdio;
import std.algorithm;

void SortAndReverse() {
   int[] values=[ 20, 13, 4, 9, 11 ];

   // The counter is commonly named as 'i'
   int i;

   writeln("Sorted Elements: ");
   sort(values);

   i = 0;
   while (i < values.length) {
       write(values[i], " ");
       ++i;
   }
   writeln();

   writeln("Reversed Elements: ");
   reverse(values);

   i = 0;
   while (i < values.length) {
       write(values[i], " ");
       ++i;
   }
   writeln();
}
```

Code to sort and reverse elements of an array

Code explanation

In the above code, we are particularly interested in three lines:

- **Line 5:**

```
  int[] values=[ 20, 13, 4, 9, 11 ];
```

  Here, we are declaring an array named `values`. Also, we are initializing the array with five integer values, which will be sorted and reversed later in the code.

- **Line 11:**

```
sort(values);
```

  In this line, we are calling the function `sort` to achieve our first objective of the program, which is to sort the elements of the array `values`.

- **Line 15:**

```
write(values[i], " ");
```

  This line of code makes sure that array elements are displayed space-separated, which is the desired output format.

- **Line 21:**

```
reverse(values);
```

  This part of the code uses the `reverse` function to achieve the second objective of our program, which is to reverse the elements in the array `values.`

In the next lesson, we will learn about slices and other array features.