1. Read 10 numbers into an array, copy them into another, then display the result.

2. Save the 10 numbers loaded from the keyboard into the array, and then display the information about which numbers have repeated themselves.

3. Read a positive integer of type long int and check if all the digits are different in its notation. Write out the ones that are repeated.

4. Write a program to check whether a number read from the keyboard is a palindrome, i.e.,

read from the end is the same, e.g., 12321, 234432, 3445

5. Read 10 numbers into an array, then sort in order from smallest to largest (use the bubble sort algorithm).

6. Read 10 numbers into an array, then sort in order from smallest to largest (use the insertion sort algorithm).

7. Read 10 numbers into an array, then sort in order from smallest to largest (use the selection sort algorithm)

8. Write a program that writes backwards the words given in the input.

9. Write a program that encrypts the given string of characters using Caesar's Cipher. The program should be able to both encrypt and decrypt the message.

**Cipher Description**: We convert each letter of the plaintext into a letter shifted 3 places to the right. Thus, we encrypt the letter A as the letter D, the letter B as E, and so on. In the case of the letter Z, we choose the letter C. To decrypt the text, we repeat the operation this time moving the letters 3 positions to the left.