

# Algorithm Exercises

## Diagnostics and Review

**Expectations:**

C2. Analyze algorithms for their effectiveness in solving a problem

For each of the following exercises:

1. Write the algorithm
2. Write the program
3. Test the program

## Challenge Task:

Write an algorithm that prompts the user to enter a number. Without using any Java API methods, write a method to reverse the number. Output the reversed number to the user.

Sample Output:

```
Please enter a number to be reversed:  
1234  
The number reversed is: 4321
```