1.32 BIT signed integers

#include <stdio.h>

#include <limits.h> // For INT\_MAX and INT\_MIN

int reverseInteger(int x) {

int reversed = 0;

while (x != 0) {

int digit = x % 10;

x /= 10;

if (reversed > INT\_MAX / 10 || (reversed == INT\_MAX / 10 && digit > 7)) return 0;

if (reversed < INT\_MIN / 10 || (reversed == INT\_MIN / 10 && digit < -8)) return 0;

reversed = reversed \* 10 + digit;

}

return reversed;

}

int main() {

int num = -123456789;

int reversedNum = reverseInteger(num);

printf("Original Number: %d\n", num);

printf("Reversed Number: %d\n", reversedNum);

return 0;

}

Output:

Original Number: -123456789

Reversed Number: -987654321

=== Code Execution Successful ===

