

### rExtEvenDigits

Write a **recursive** function **rExtEvenDigits()** that extracts the even digits from a positive number *num*, and combines the even digits sequentially into a new number. If the input number *num* does not contain any even digits, then returns -1. The function passes the result to the caller through the pointer parameter *evenPtr*. For example, if *num* is 1234, then 24 is returned through *evenPtr*; and if *num* is 1357, then -1 is returned. You may assume that the input number does not contain the digit 0. The function prototype is given below:

```
void rExtEvenDigits(int num, int *evenPtr);
```

Write a C program to test the function.

A sample program to test the function is given below:

```
#include <stdio.h>
void rExtEvenDigits(int num, int *evenPtr);
int main()
{
    int number, result;

    printf("Enter a number: \n");
    scanf("%d", &number);
    rExtEvenDigits(number, &result);
    printf("rExtEvenDigits(): %d\n", result);
    return 0;
}
void rExtEvenDigits(int num, int *evenPtr)
{
    /* Write your code here */
}
```

Some sample input and output sessions are given below:

- (1) Test Case 1:  
Enter a number:  
1234  
rExtEvenDigits(): 24
- (2) Test Case 2:  
Enter a number:  
1357  
rExtEvenDigits(): -1
- (3) Test Case 3:  
Enter a number:  
2468  
rExtEvenDigits(): 2468
- (4) Test Case 4:  
Enter a number:  
6  
rExtEvenDigits(): 6