

reverseDigits

Write a C function that takes in a positive integer number, reverses its digits and returns the result to the calling function. You may assume that the last digit of the input number is not 0, i.e. the number will not be in the form of 1110, 1200, etc. The function **reverseDigits()** returns the computed result. The function prototype is given as follows:

```
int reverseDigits(int num);
```

A sample program template is given below to test the functions:

```
#include <stdio.h>
int reverseDigits(int num);
int main()
{
    int num, result=999;

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

Some sample input and output sessions are given below:

(1) Test Case 1: Enter a number: 12045 reverseDigits(): 54021	#include <stdio.h> int reverseDigits(int num); int main() { int num, result=999; printf("Enter a number: \n"); scanf("%d", &num); printf("reverseDigits(): %d\n", reverseDigits(num)); return 0; } int reverseDigits(int num) { int remainder, dec = 0; while(num!=0) { remainder = num%10; dec = dec*10; dec = dec + remainder; num = num/10; } num= dec; }
(2) Test Case 2: Enter a number: 123 reverseDigits(): 321	
(3) Test Case 3: Enter a number: 8 reverseDigits(): 8	