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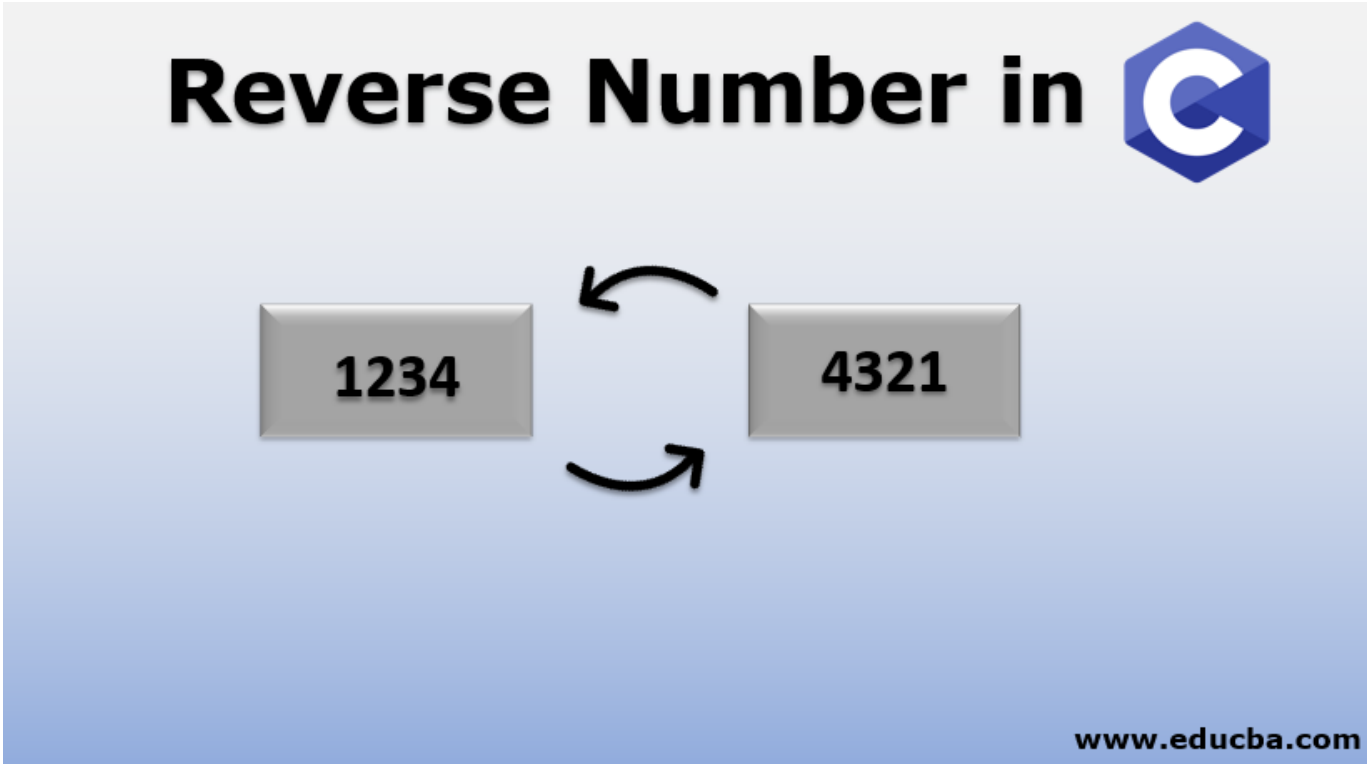

Introduction to Reverse Number in C

There are many programming languages (https://www.educba.com/what-is-a-program language/), and C language is known for base language for all programming language. I the user to do perform various operations using inbuilt functions. Other than inbuilt, it also allows us to create customize functions to develop a new logic. In this article, we are going to

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Logic of Reverse Number in C

To reverse a number in C, we used modulus (%). The logic for the reverse number is as follows:

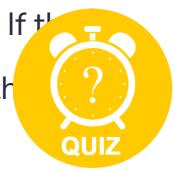
1. First, initialize a reverse number to 0.
2. Then, multiply reverse by 10.
3. Divide given number by 10 and find modulus.
4. Add the modulus and reverse number.
5. Print the result of 4th step.
6. Divide a given number by 10
7. Repeat the step from 2 to 6 until the output comes.

How to Reverse a Number in C?

In this section, we are going to see how to reverse a number using various methods with the help of examples.

Example 1: Reverse Number Using the While Loop

First, we have to understand the working of the While loop. While the loop gets executed several times based on the condition which is mentioned after the word While in code. If this condition is true then it will execute the code inside the parenthesis of the While loop. If th condition is false then it will jump to the code after the While loop without executing th of While loop. Let's see how to find reverse numbers using the While loop.



Code:

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```
{
int number, reverse_number = 0;
printf("Enter a number to reverse value:"); // allow user to enter
a number
scanf("%d", &number); // takes value from user
while (number != 0)
{
reverse_number = reverse_number * 10;
reverse_number = reverse_number + number % 10;
number = number / 10;
}
printf("Reverse of entered number is: %d", reverse_number);
//print reverse value
return 0;
}
```

Output:

Example 2: Reverse Number Using Recursion

Code:

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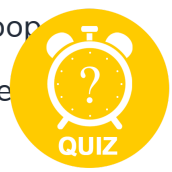
```
int number, reverse_number = 0;
printf("Enter a number to reverse value:"); // allow user to enter
a number
scanf("%d", &number); // takes value from user
reverse_number = reverse(number);
printf("Reverse of entered number is: %d", reverse_number); //
print reverse value
return 0;
}
reverse(int number)
{
static reverse_number = 0;
if (number == 0)
return 0;
reverse_number = reverse_number * 10;
reverse_number = reverse_number + number % 10;
reverse(number/10);
return reverse_number;
}
```

Output:

Example 3: Reverse Number Using For Loop

First, we will understand the working of For Loop which is given below:

In the For loop, firstly we initialize and declare variables for the code. After that condition is evaluated. This initialization step is executed only once in the Code. If the condition is true then it will execute the code inside the block of For loop. If the condition is false then it will jump to the code after the For loop without executing the code of For loop. After the For loop, the increment statement will be executed. After that again the condition will be checked. Loop will get executed if the condition is true and the loop will repeat itself i.e. the body of the loop, increment statement, and condition. The loop ends when the condition is false. Let's see to find a reverse number using For loop.



Code:

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```
{
int number, remainder_number, reverse_number= 0, i;
printf("Enter a number to reverse value:"); // allow user to enter a number
scanf("%d", &number); // takes value from user
for(i = number; i >0; )
{
remainder_number= i % 10;
reverse_number = remainder_number + reverse_number * 10;
i = i/ 10;
}
printf("Reverse of entered number is: %d", reverse_number);
//print reverse value
return 0;
}
```

Output:

Example 4: Reverse Number Using the Do-while Loop

A do-while loop is similar to a while loop, But in the do-while loop, the loop gets execute least one time.

In the Do While loop, The condition appears at the end of the loop, so the statements in the Do

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javascript/).

Code:

```
#include<stdio.h>
#include<conio.h>
int main()
{
int number, reverse_number = 0;
printf("Enter a number to reverse value:"); // allow user to enter
a number
scanf("%d", &number); // takes value from user
do
{
reverse_number = reverse_number * 10;
reverse_number = reverse_number + number % 10;
number = number / 10;
}while(number != 0);
printf("Reverse of entered number is: %d", reverse_number);
//print reverse value
return 0;
}
```

Output:

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elaborated examples. I hope this article will help you in understanding the working of factorial in C and you find this article helpful.

Recommended Articles

This is a guide to Reverse Number in C. Here we discuss how to Reverse a Number in C along with logic and examples with code implementation. You can also go through our other suggested articles to learn more –

1. Number Patterns in C (https://www.educba.com/number-patterns-in-c/)
2. Random Number Generator in C (https://www.educba.com/random-number-generator-in-c/)
3. Variables in C (https://www.educba.com/variables-in-c/)
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