## First Digit of a Number

Given a number to find first digit of a number.

## **Examples:**

```
Input : 123456
Output : First digit: 1

Input : 98562
Output : First digit: 9
```

The approach uses mathematical operations to find the first digit of a number. It is based on the idea that when we divide a number by 10, the rightmost digit is dropped and the rest of the digits shift one place to the left. For example, if we have the number 123456, when we divide it by 10, we get 12345.6, and 6 is dropped. If we divide 12345 by 10, we get 1234.5, and the 5 is dropped. And so on.

Here is the step-by-step process of the second approach:

- Initialize the number you want to find the first digit of
- Use a while loop to repeatedly divide the number by 10 until the number is less than 10.
- The last value of the number will be the first digit of the original number because it is the only digit left after the divisions have dropped all the others.

```
#include<iostream>
using namespace std;

int firstDigit(int n)
{
    while(n>=10)
    {
        n/=10;
    }
    return n;
}
```

First Digit of a Number

```
int main()
{
   int n;
   cin>>n;
   cout<< "First Digit is: " << firstDigit(n);
   return 0;
}</pre>
```

## **INPUT:**

232

## **OUTPUT:**

2

First Digit of a Number 2