

## Q1.C Program for Prime Numbers Using For Loop

```
#include <stdio.h>

int main()
{
    int i, num, temp = 0;
    printf("Enter any numb to Check for Prime: ");
    scanf("%d", &num);
    for (i = 2; i <= num / 2; i++)
    {
        if (num % i == 0)

        {
            temp++;
            break;
        }
    }
    if (temp == 0 && num != 1)

    {
        printf("%d is a Prime number", num);
    }
    else
    {
        printf("%d is not a Prime number", num);
    }
    return 0;
}
```

Logic : The prime number logic it is divisible by 1 and itself, other than this is not prime.

Name: Jameel Ahmed Kustagi

```
main.c
1
2
3 #include <stdio.h>
4 int main()
5 {
6     int i, num, temp = 0;
7     printf("Enter any numb to Check for Prime: ");
8     scanf("%d", &num);
9     for (i = 2; i <= num / 2; i++)
10    {
11        if (num % i == 0)
12        {
13            temp++;
14            break;
15        }
16    }
17    if (temp == 0 && num != 1)
18
input
Enter any numb to Check for Prime: 2
2 is a Prime number

...Program finished with exit code 0
Press ENTER to exit console.

main.c
1
2
3 #include <stdio.h>
4 int main()
5 {
6     int i, num, temp = 0;
7     printf("Enter any numb to Check for Prime: ");
8     scanf("%d", &num);
9     for (i = 2; i <= num / 2; i++)
10    {
11        if (num % i == 0)
12        {
13            temp++;
14            break;
15        }
16    }
17    if (temp == 0 && num != 1)
18
input
Enter any numb to Check for Prime: 4
4 is not a Prime number

...Program finished with exit code 0
Press ENTER to exit console.

main.c
1
2
3 #include <stdio.h>
4 int main()
5 {
6     int i, num, temp = 0;
7     printf("Enter any numb to Check for Prime: ");
8     scanf("%d", &num);
9     for (i = 2; i <= num / 2; i++)
10    {
11        if (num % i == 0)
12        {
13            temp++;
14            break;
15        }
16    }
17    if (temp == 0 && num != 1)
18
input
Enter any numb to Check for Prime: 3
3 is a Prime number

...Program finished with exit code 0
Press ENTER to exit console.
```

## Q2. Program to replace all 0's with 1 in a given integer

```
#include<stdio.h>

int main()
{
    int num,num2=0;
    printf("Enter number: ");
    scanf("%d", &num);
    if(num == 0)
        num2=1;
    while(num>0)
    {
        int rem = num%10;
        if(rem == 0)
            rem = 1;
        num = num/10;
        num2=num2*10+rem;
    }
    num = 0 ;
    while(num2>0){
        int r = num2%10;
        num= num*10 + r;
        num2 /= 10;
    }
    printf("Converted number is: %d" ,num);
    return 0;
}
```

Logic: In the integer any number is 0 then it is converted to 1 by simplifying.

OUTPUT:

Name: Jameel Ahmed Kustagi

```
main.c
1 #include<stdio.h>
2
3 int main()
4 {
5     int num,num2=0;
6     printf("Enter number: ");
7     scanf("%d", &num);
8     if(num == 0)
9         num2=1;
10    while(num>0)
11    {
12        int digit=num%10;
13        num2=num2*10+digit;
14        num=num/10;
15    }
16    printf("Reversed number is: %d", num2);
17    return 0;
18 }
19
```

input

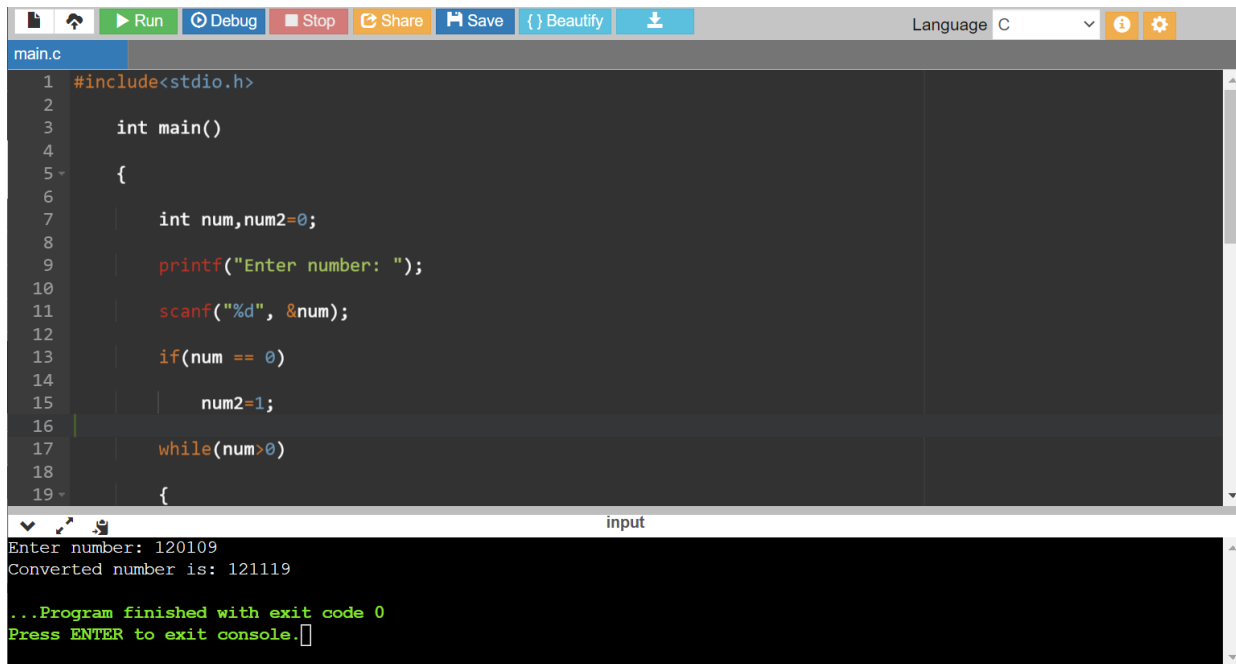
Enter number: 10002  
Converted number is: 21001  
...Program finished with exit code 0  
Press ENTER to exit console.

```
main.c
1 #include<stdio.h>
2
3 int main()
4 {
5     int num,num2=0;
6     printf("Enter number: ");
7     scanf("%d", &num);
8     if(num == 0)
9         num2=1;
10    while(num>0)
11    {
12        int digit=num%10;
13        num2=num2*10+digit;
14        num=num/10;
15    }
16    printf("Reversed number is: %d", num2);
17    return 0;
18 }
19
```

input

Enter number: 1002011  
Converted number is: 1112011  
...Program finished with exit code 0  
Press ENTER to exit console.

Name: Jameel Ahmed Kustagi



The image shows a screenshot of a C program in an IDE. The code is in a file named `main.c` and is as follows:

```
1 #include<stdio.h>
2
3 int main()
4 {
5     int num,num2=0;
6
7     printf("Enter number: ");
8
9     scanf("%d", &num);
10
11     if(num == 0)
12     {
13         num2=1;
14     }
15
16     while(num>0)
17     {
18
19
```

The IDE's toolbar at the top includes buttons for Run, Debug, Stop, Share, Save, Beautify, and a download icon. The Language dropdown is set to C. Below the code editor, the console output is visible:

```
input
Enter number: 120109
Converted number is: 121119
...Program finished with exit code 0
Press ENTER to exit console.
```