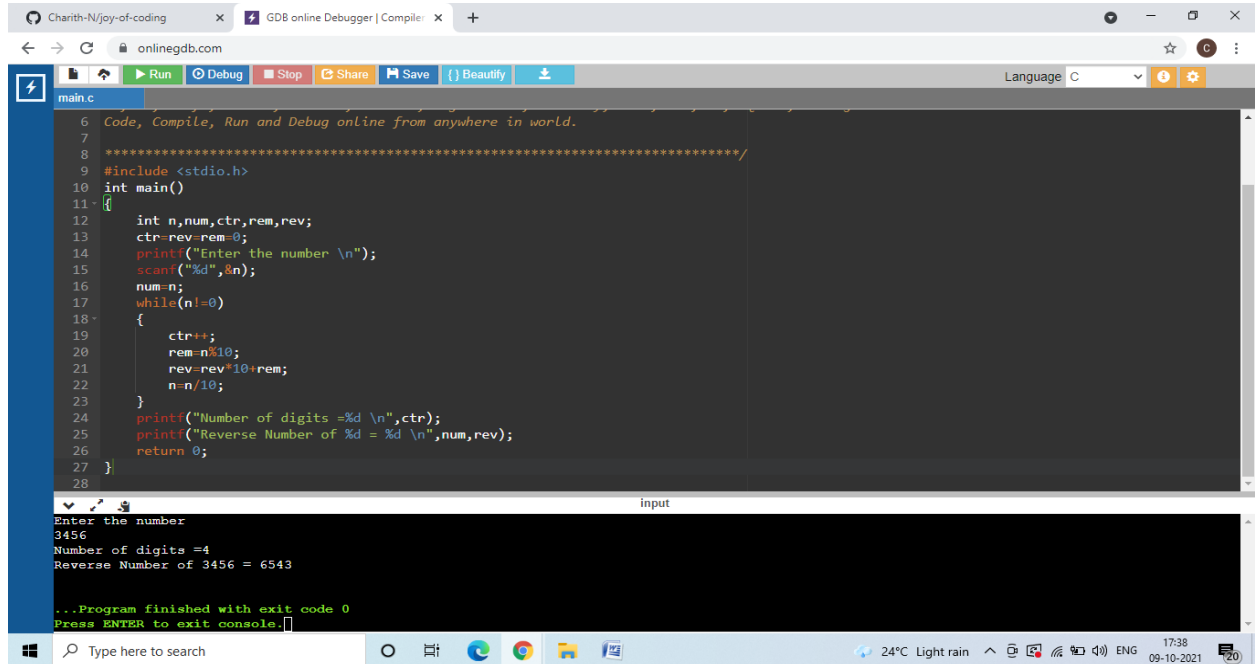


USN : 1RN20CS035

Name : Charith.N

1.



The screenshot shows a web browser window with the URL 'onlinegdb.com'. The page title is 'GDB online Debugger | Compiler'. The code editor displays a C program in 'main.c' that takes an integer input and reverses its digits. The program uses a while loop to extract digits and build the reversed number. The console output shows the input '3456', the number of digits '4', and the reversed number '6543'. The program finishes with exit code 0.

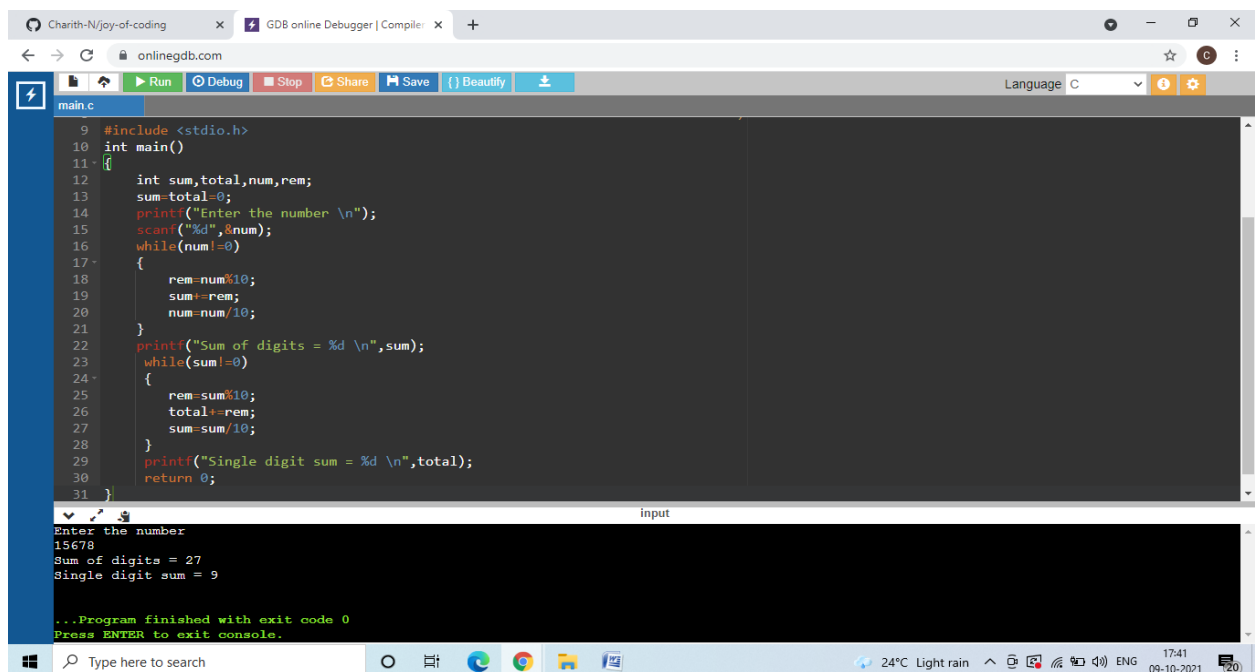
```
6 Code, Compile, Run and Debug online from anywhere in world.
7
8 *****
9 #include <stdio.h>
10 int main()
11 {
12     int n,num,ctr,rem,rev;
13     ctr=rev=rem=0;
14     printf("Enter the number \n");
15     scanf("%d",&n);
16     num=n;
17     while(n!=0)
18     {
19         ctr++;
20         rem=n%10;
21         rev=rev*10+rem;
22         n=n/10;
23     }
24     printf("Number of digits =%d \n",ctr);
25     printf("Reverse Number of %d = %d \n",num,rev);
26     return 0;
27 }
28
```

input

Enter the number
3456
Number of digits =4
Reverse Number of 3456 = 6543
...Program finished with exit code 0
Press ENTER to exit console.

2.

Test case - 1



The screenshot shows a web browser window with the URL 'onlinegdb.com'. The page title is 'GDB online Debugger | Compiler'. The code editor displays a C program in 'main.c' that calculates the sum of digits and the single digit sum of a number. The program uses two while loops: the first to calculate the sum of digits, and the second to calculate the single digit sum. The console output shows the input '15678', the sum of digits '27', and the single digit sum '9'. The program finishes with exit code 0.

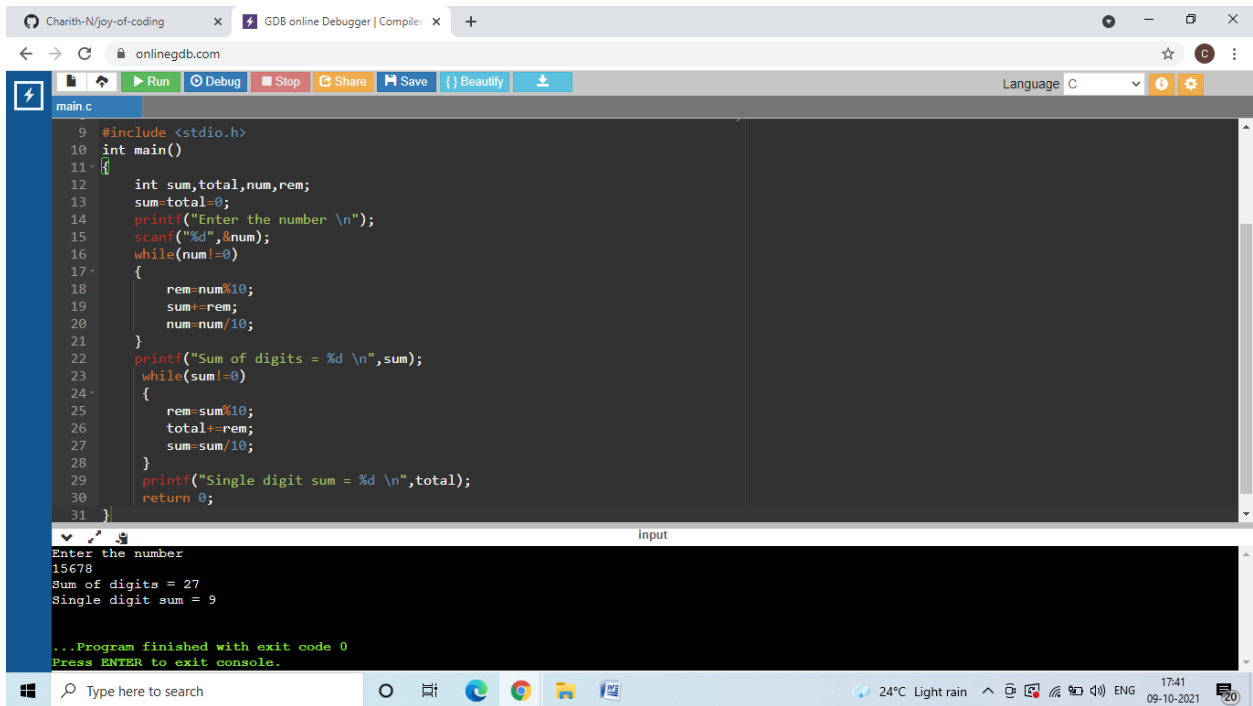
```
9 #include <stdio.h>
10 int main()
11 {
12     int sum,total,num,rem;
13     sum=total=0;
14     printf("Enter the number \n");
15     scanf("%d",&num);
16     while(num!=0)
17     {
18         rem=num%10;
19         sum+=rem;
20         num=num/10;
21     }
22     printf("Sum of digits = %d \n",sum);
23     while(sum!=0)
24     {
25         rem=sum%10;
26         total+=rem;
27         sum=sum/10;
28     }
29     printf("Single digit sum = %d \n",total);
30     return 0;
31 }

```

input

Enter the number
15678
Sum of digits = 27
Single digit sum = 9
...Program finished with exit code 0
Press ENTER to exit console.

Test case – 2



```
9 #include <stdio.h>
10 int main()
11 {
12     int sum,total,num,rem;
13     sum-total=0;
14     printf("Enter the number \n");
15     scanf("%d",&num);
16     while(num!=0)
17     {
18         rem=num%10;
19         sum+=rem;
20         num=num/10;
21     }
22     printf("Sum of digits = %d \n",sum);
23     while(sum!=0)
24     {
25         rem=sum%10;
26         total+=rem;
27         sum=sum/10;
28     }
29     printf("Single digit sum = %d \n",total);
30     return 0;
31 }
```

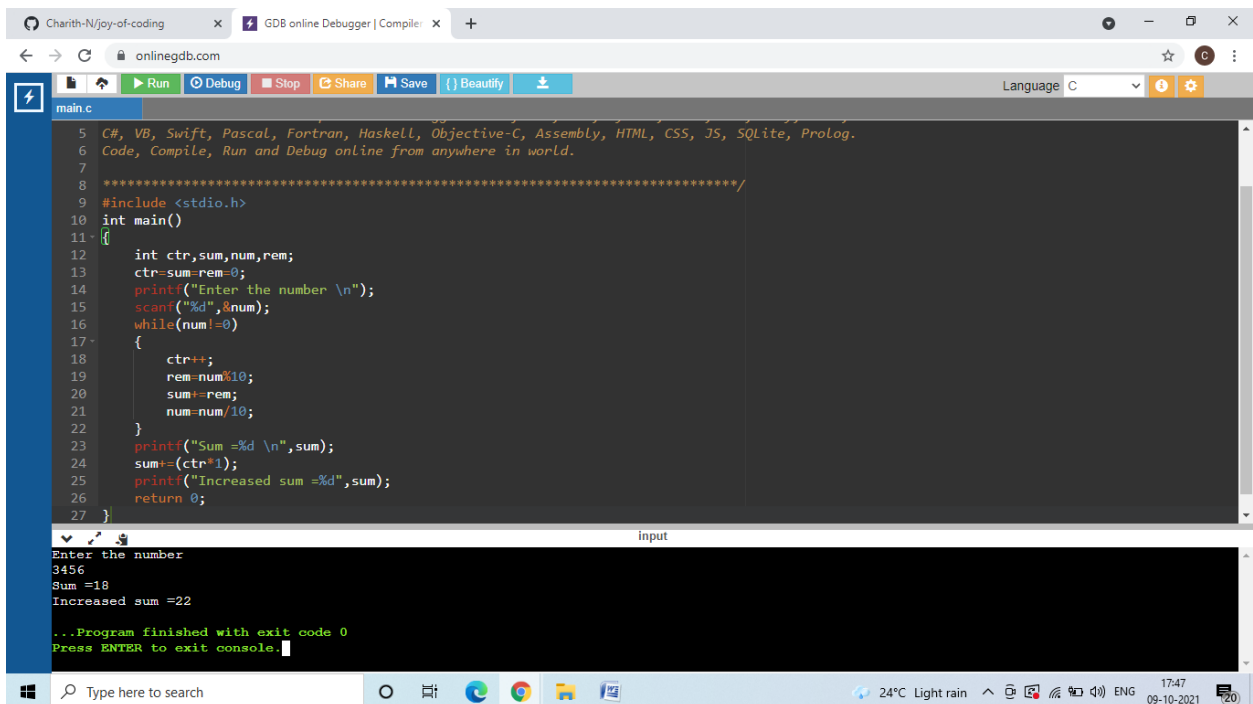
Input

Enter the number
15678
Sum of digits = 27
Single digit sum = 9

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

3.

Test case-1



```
5 C#, VB, Swift, Pascal, Fortran, Haskell, Objective-C, Assembly, HTML, CSS, JS, SQLite, Prolog.
6 Code, Compile, Run and Debug online from anywhere in world.
7
8 *****/
9 #include <stdio.h>
10 int main()
11 {
12     int ctr,sum,num,rem;
13     ctr=sum=rem=0;
14     printf("Enter the number \n");
15     scanf("%d",&num);
16     while(num!=0)
17     {
18         ctr++;
19         rem=num%10;
20         sum+=rem;
21         num=num/10;
22     }
23     printf("Sum =%d \n",sum);
24     sum+=(ctr*1);
25     printf("Increased sum =%d",sum);
26     return 0;
27 }
```

Input

Enter the number
3456
Sum =18
Increased sum =22

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

Test case-2

The screenshot shows the onlinegdb.com interface. The code editor contains a C program that calculates the sum of digits of a number. The program includes `<stdio.h>` and defines a `main` function. It uses a `while` loop to process the number digit by digit, updating a `sum` variable and a `ctr` (counter) variable. The output console shows the input '111', the intermediate sum '3', and the final increased sum '6'. The program finishes with exit code 0.

```
5 C#, VB, Swift, Pascal, Fortran, Haskell, Objective-C, Assembly, HTML, CSS, JS, SQLite, Prolog.
6 Code, Compile, Run and Debug online from anywhere in world.
7
8 *****/
9 #include <stdio.h>
10 int main()
11 {
12     int ctr,sum,num,rem;
13     ctr=sum=rem=0;
14     printf("Enter the number \n");
15     scanf("%d",&num);
16     while(num!=0)
17     {
18         ctr++;
19         rem=num%10;
20         sum+=rem;
21         num=num/10;
22     }
23     printf("Sum =%d \n",sum);
24     sum+=ctr*1;
25     printf("Increased sum =%d",sum);
26     return 0;
27 }
```

Input

```
Enter the number
111
Sum =3
Increased sum =6
...Program finished with exit code 0
Press ENTER to exit console.
```

4.

Test case-1

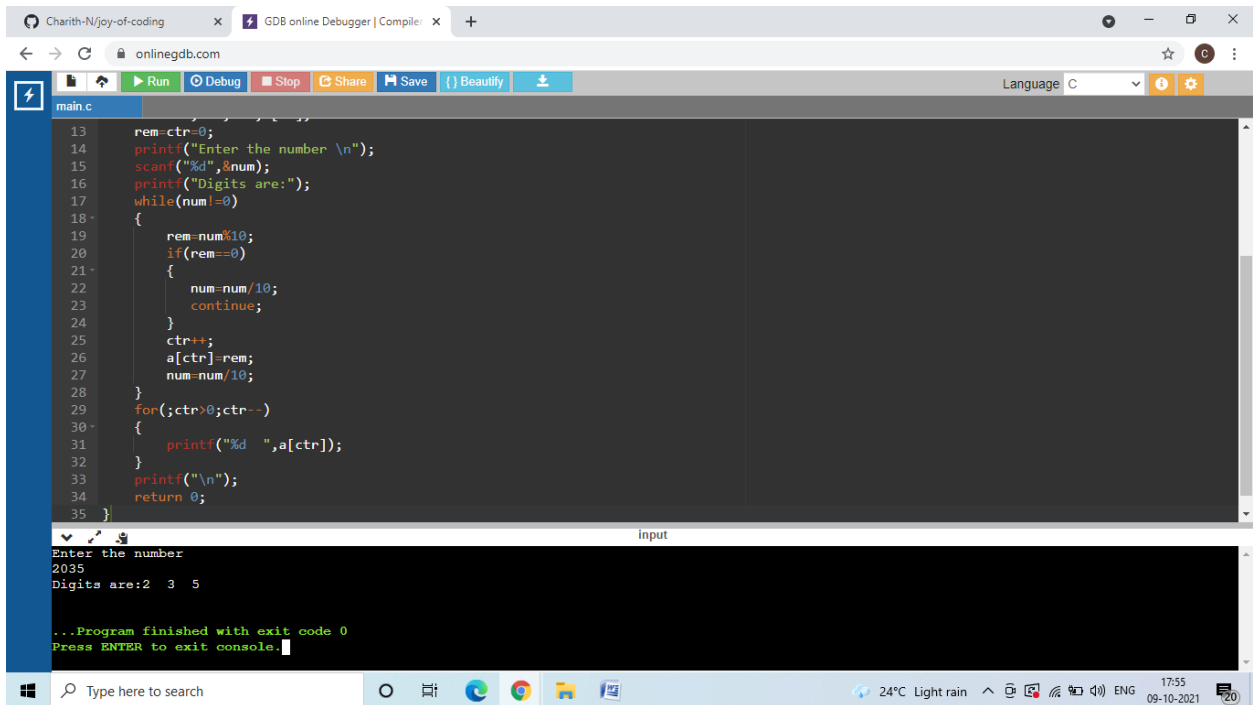
The screenshot shows the onlinegdb.com interface. The code editor contains a C program that reverses a number. The program includes `<stdio.h>` and defines a `main` function. It uses a `while` loop to process the number digit by digit, storing the digits in an array `a`. The output console shows the input '8245', the digits '8 2 4 5', and the program finishes with exit code 0.

```
13 rem=ctr=0;
14 printf("Enter the number \n");
15 scanf("%d",&num);
16 printf("Digits are:");
17 while(num!=0)
18 {
19     rem=num%10;
20     if(rem==0)
21     {
22         num=num/10;
23         continue;
24     }
25     ctr++;
26     a[ctr]=rem;
27     num=num/10;
28 }
29 for(ctr>0;ctr--)
30 {
31     printf("%d ",a[ctr]);
32 }
33 printf("\n");
34 return 0;
35 }
```

Input

```
Enter the number
8245
Digits are:8 2 4 5
...Program finished with exit code 0
Press ENTER to exit console.
```

Test case-2

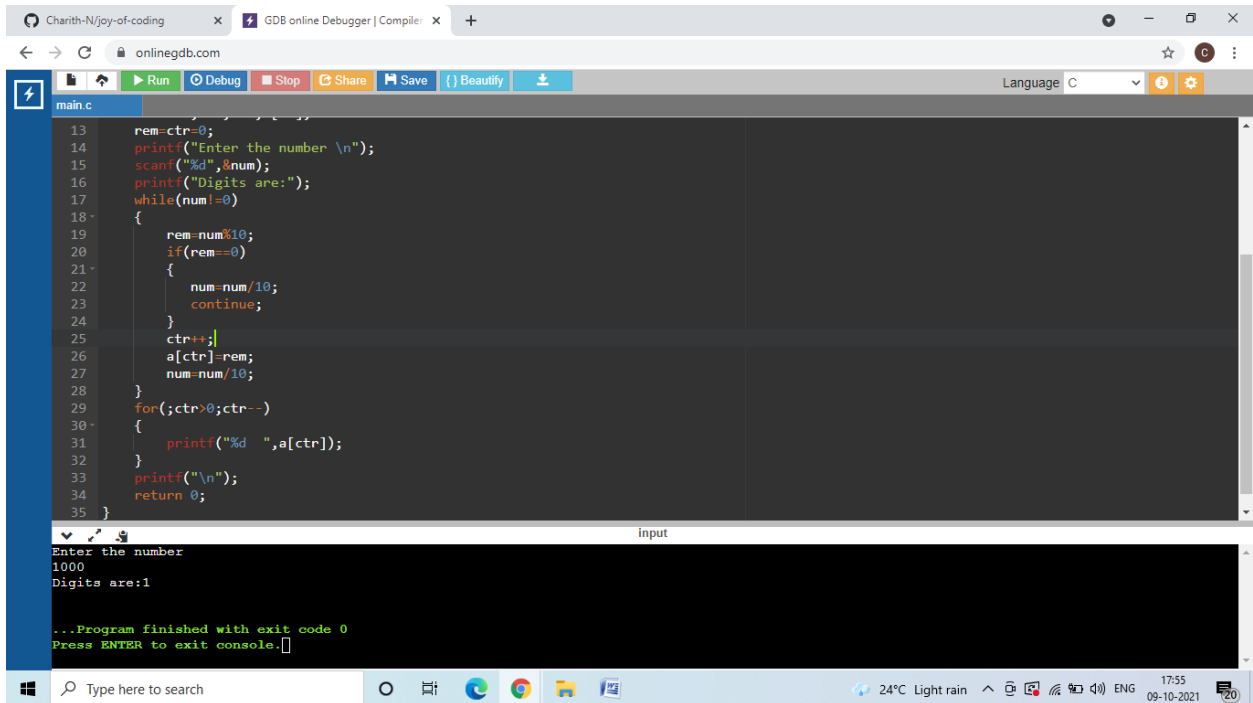


The screenshot shows the GDB online Debugger interface. The code is a C program that takes a number and prints its digits. The input is 2035, and the output is 'Digits are: 2 3 5'.

```
13 rem=ctr-0;
14 printf("Enter the number \n");
15 scanf("%d",&num);
16 printf("Digits are:");
17 while(num!=0)
18 {
19     rem=num%10;
20     if(rem==0)
21     {
22         num=num/10;
23         continue;
24     }
25     ctr++;
26     a[ctr]=rem;
27     num=num/10;
28 }
29 for(;ctr>0;ctr--)
30 {
31     printf("%d ",a[ctr]);
32 }
33 printf("\n");
34 return 0;
35 }
```

Input: Enter the number 2035
Output: Digits are: 2 3 5
...Program finished with exit code 0
Press ENTER to exit console.

Test case-3



The screenshot shows the GDB online Debugger interface. The code is a C program that takes a number and prints its digits. The input is 1000, and the output is 'Digits are: 1'.

```
13 rem=ctr-0;
14 printf("Enter the number \n");
15 scanf("%d",&num);
16 printf("Digits are:");
17 while(num!=0)
18 {
19     rem=num%10;
20     if(rem==0)
21     {
22         num=num/10;
23         continue;
24     }
25     ctr++;
26     a[ctr]=rem;
27     num=num/10;
28 }
29 for(;ctr>0;ctr--)
30 {
31     printf("%d ",a[ctr]);
32 }
33 printf("\n");
34 return 0;
35 }
```

Input: Enter the number 1000
Output: Digits are: 1
...Program finished with exit code 0
Press ENTER to exit console.

5.

Test case-1

The screenshot shows a web browser window with the URL `onlinegdb.com`. The page has a toolbar with buttons for Run, Debug, Stop, Share, Save, and Beautify. The code editor displays a C program named `main.c` with the following code:

```
6 Code, Compile, Run and Debug online from anywhere in world.
7
8 *****
9 #include <stdio.h>
10
11 int main()
12 {
13     int num=0, num1=1000, quo, i, inc=0;
14
15     printf("Enter an integer: ");
16     scanf("%d", &num);
17
18     for(i=0; i<4; i++)
19     {
20         quo=(int)(num/num1);
21         inc=(int)((quo+1)%10);
22         printf("%d", inc);
23         num=quo*num1;
24         num1/=10;
25     }
26
27     return 0;
28 }
```

The input field shows the user entered `8245`. The output field shows the result `9356`. Below the output, it says `...Program finished with exit code 0` and `Press ENTER to exit console.`

Test case-2:

The screenshot shows the same online C compiler interface. The code is identical to the first screenshot. The input field shows the user entered `4184`. The output field shows the result `5295`. Below the output, it says `...Program finished with exit code 0` and `Press ENTER to exit console.`

Test case-3:

Charith-N/joy-of-coding x GDB online Debugger | Compiler x +

onlinegdb.com

Language C

main.c

```
6 Code, Compile, Run and Debug online from anywhere in world.
7
8 ****
9 #include <stdio.h>
10
11 int main()
12 {
13     int num=0, num1=1000, quo, i, inc=0;
14
15     printf("Enter an integer: ");
16     scanf("%d", &num);
17
18     for(i=0; i<4; i++)
19     {
20         quo=(int)(num/num1);
21         inc=(int)((quo+1)%10);
22         printf("%d", inc);
23         num=quo*num1;
24         num1/=10;
25     }
26
27     return 0;
28 }
```

input

```
Enter an integer: 2295
3306

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

Type here to search

24°C Light rain 17:59 09-10-2021 ENG