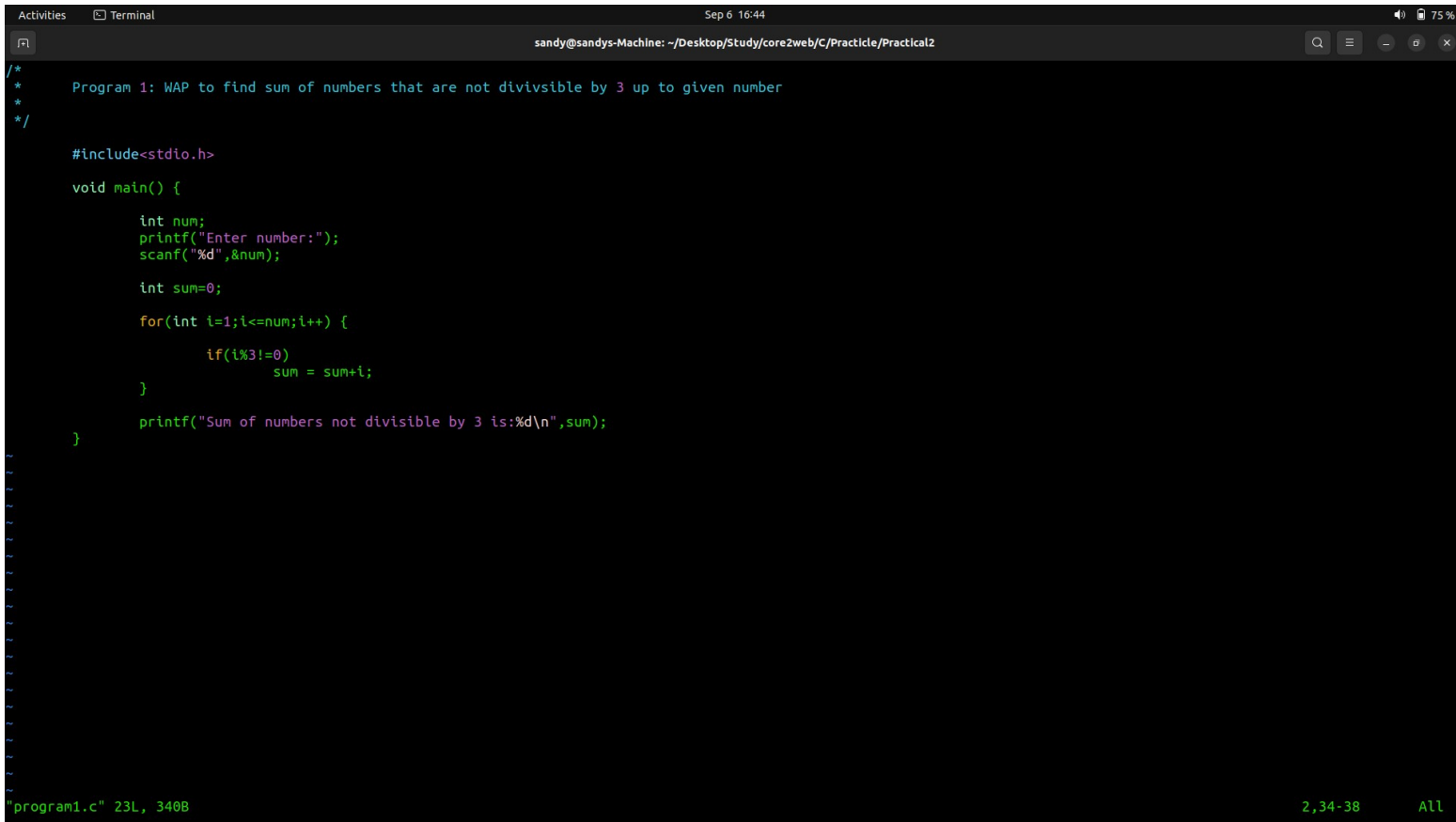# Practical 2

Program 1:


```
/*
 *      Program 1: WAP to find sum of numbers that are not divivsible by 3 up to given number
 *
 */

#include<stdio.h>

void main() {

        int num;
        printf("Enter number:");
        scanf("%d",&num);

        int sum=0;

        for(int i=1;i<=num;i++) {

                if(i%3!=0)
                        sum = sum+i;
        }

        printf("Sum of numbers not divisible by 3 is:%d\n",sum);
}
```
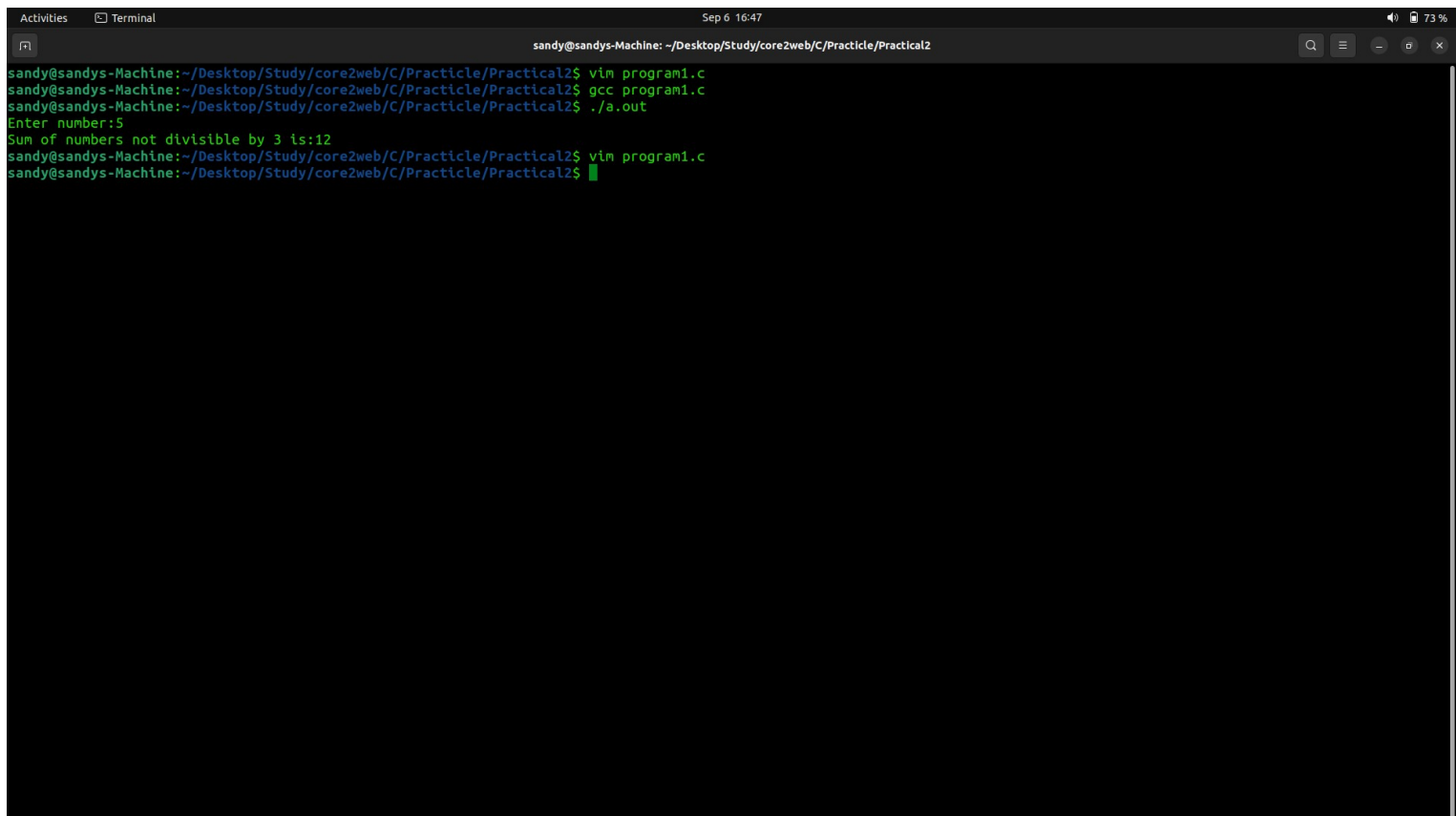
"program1.c" 23L, 340B   2,34-38   All


```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program1.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program1.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:5
Sum of numbers not divisible by 3 is:12
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program1.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```

Program 2:

```
/*
 *      Program 2:      WAP to print the addition of 1 to 10 with 10 to 1
 *
 */

        #include<stdio.h>

        void main() {

                for(int i=1,j=10;i<=10,j>=1;i++,j--) {

                        printf("%d+%d=%d\n",i,j,i+j);
                }
        }
```

"program2.c" 14L, 199B   9,1-8   All

```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program2.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program2.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
1+10=11
2+9=11
3+8=11
4+7=11
5+6=11
6+5=11
7+4=11
8+3=11
9+2=11
10+1=11
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```

Program 3:

```c
/*
 * Program 3: WAP to print the divisors and count of divisors of the entered number
 */

#include<stdio.h>

void main() {

    int num;
    printf("Enter a number:");
    scanf("%d",&num);

    int sum=0,cnt=0;

    printf("The divisors are:");

    for(int i=1;i<=num;i++) {

        if(num%i==0) {
            printf("%d ",i);
            cnt++;
            sum=sum+i;
        }
    }

    printf("\nThe count of divisors is:%d\n",cnt);
    printf("Additions of divisors is:%d\n",sum);

}
```

```
"program3.c" 29L, 449B                                          13,3-17        All
```

```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program3.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program3.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter a number:15
The divisors are:1 3 5 15
The count of divisors is:4
Additions of divisors is:24
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```

Program 4:

```c
/*
 *      Program 4: WAP to take a number as input and print weather it is prime of not.
 *
 */

#include<stdio.h>

void main() {

        int num;

        printf("Enter number:");
        scanf("%d",&num);

        int cnt=0;

        if(num==0 || num==1 || num < 0) {

                printf("%d is not a prime number\n",num);
                return;
        }

        for(int i=1;i<=num;i++) {

                if(num%i==0)
                        cnt++;
        }

        if(cnt<=2)
                printf("%d is a prime number\n",num);
        else
                printf("%d is not a prime number\n",num);
}
```

"program4.c" 33L, 477B   13,3-17   All

```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program4.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program4.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:10
10 is not a prime number
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:13
13 is a prime number
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```

Program 5:

```c
/*
 *
 *      Program 5: WAP to print all even numbers in reverse order and odd number in standered way. Both seperately. Within a range
 *
 */


        #include<stdio.h>

        void main() {

                int startNo,endNo;

                printf("Start:");
                scanf("%d",&startNo);
                printf("End:");
                scanf("%d",&endNo);

                for(int j=endNo;j>=startNo;j--) {
                        if(j%2==0)
                                printf("%d ",j);
                }
                printf("\n");

                for(int i=startNo;i<=endNo;i++) {
                        if(i%2!=0)
                                printf("%d ",i);
                }

                printf("\n");
        }
```

"program5.c" 31L, 475B   23,1-8   All

```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program5.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program5.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Start:1
End:10
10 8 6 4 2
1 3 5 7 9
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```

Program 6:


```c
/*
 *
 *      Program 6: take input from user and count no of digits
 */


#include<stdio.h>

void main() {

        int num;

        printf("Enter number:");
        scanf("%d",&num);

        int cnt=0,tmp=num;

        while(tmp!=0) {

                cnt++;
                tmp = tmp/10;
        }

        printf("Number of digits in %d is %d\n",num,cnt);
}
```
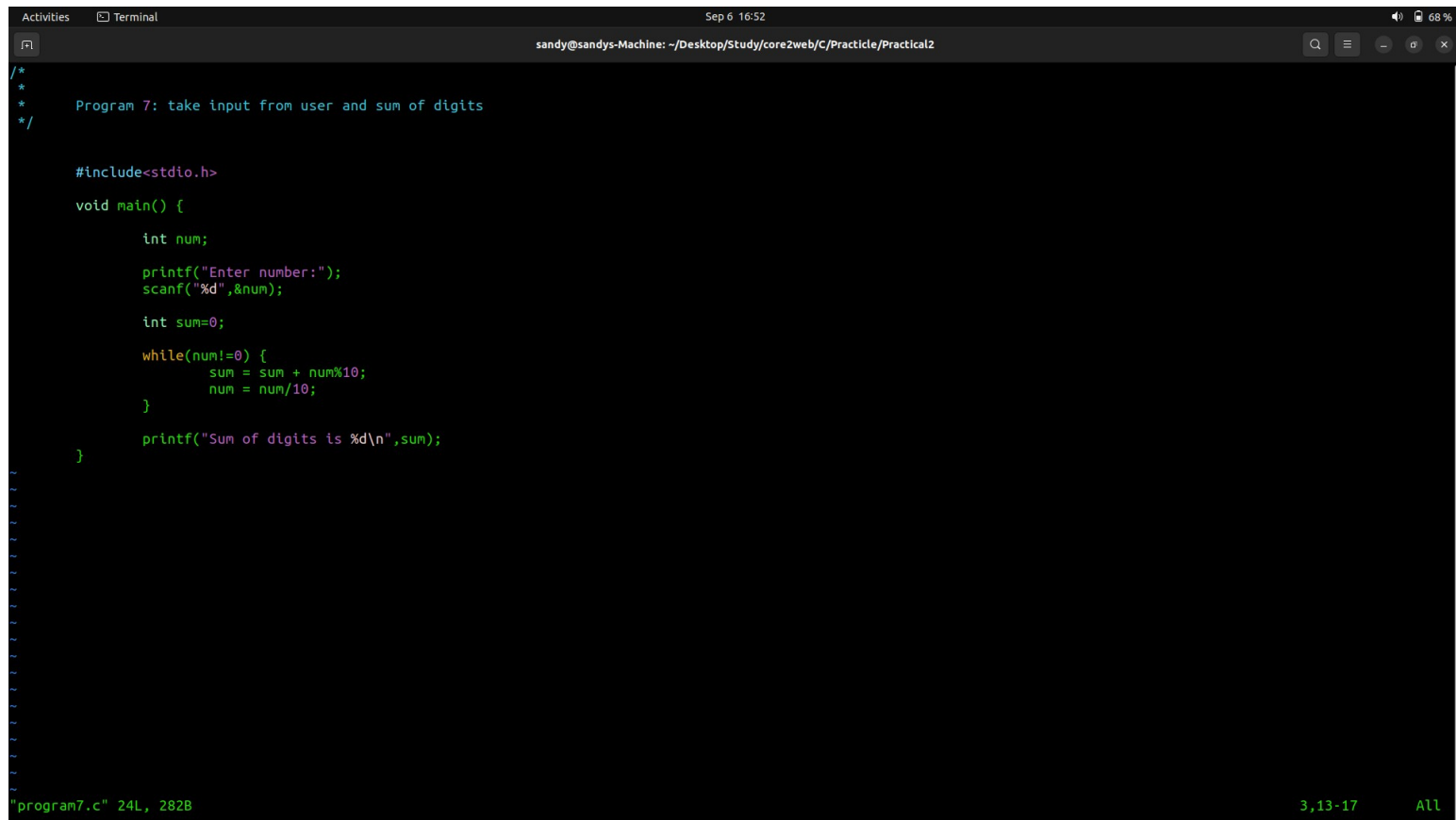
"program6.c" 25L, 298B   24,18-32   All


```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program6.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program6.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:12
Number of digits in 12 is 2
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:123456
Number of digits in 123456 is 6
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```

Program 7:

```
/*
 *
 *      Program 7: take input from user and sum of digits
 */


        #include<stdio.h>

        void main() {

                int num;

                printf("Enter number:");
                scanf("%d",&num);

                int sum=0;

                while(num!=0) {
                        sum = sum + num%10;
                        num = num/10;
                }

                printf("Sum of digits is %d\n",sum);
        }
```
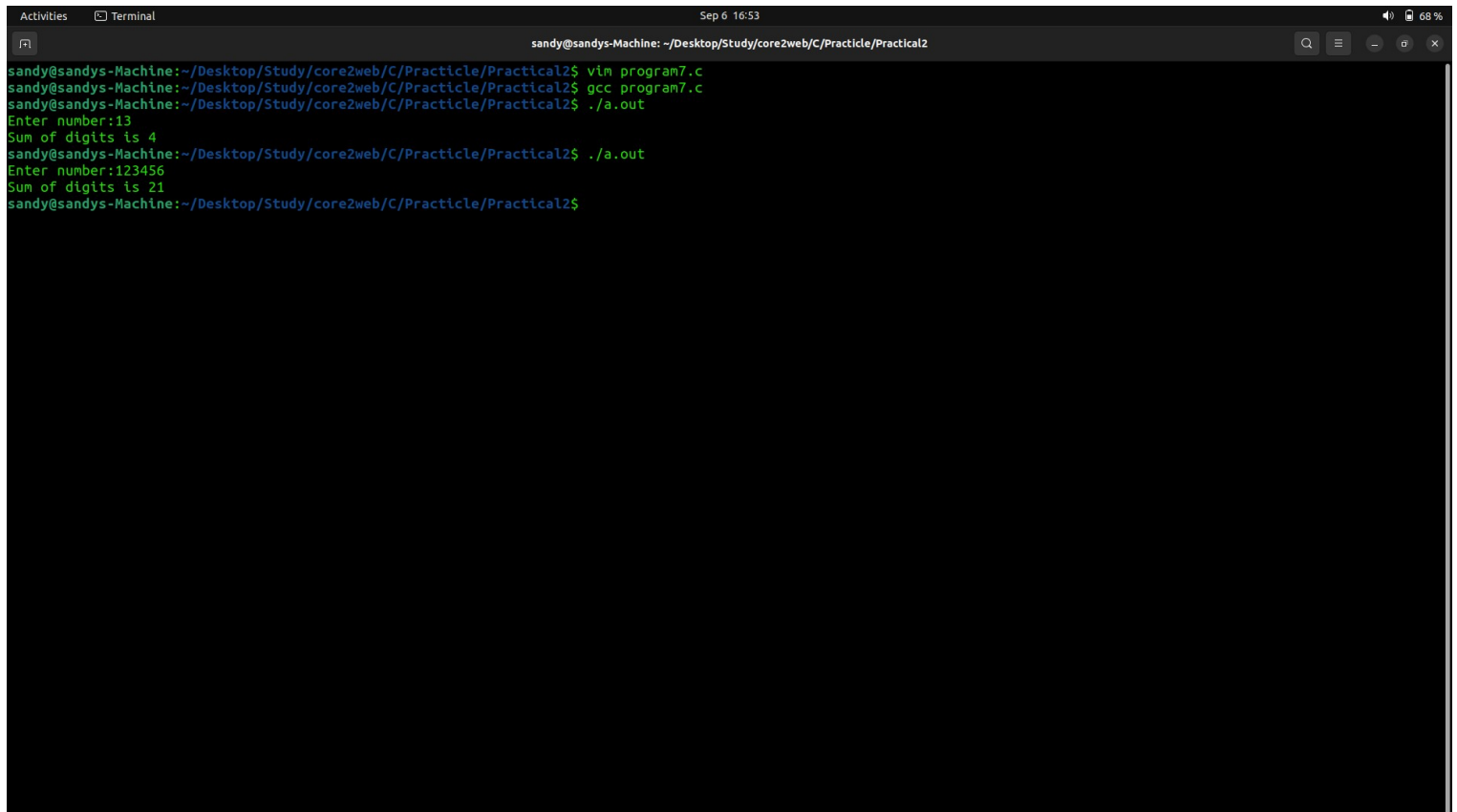
"program7.c" 24L, 282B   3,13-17   All

```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program7.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program7.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:13
Sum of digits is 4
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:123456
Sum of digits is 21
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```

Program 8:


```c
/*
 *
 *    Program 8: take input from user and print product of digits
 */


#include<stdio.h>

void main() {

        int num;

        printf("Enter number:");
        scanf("%d",&num);

        int product=1;

        while(num!=0) {
                product = product * (num%10);
                num = num/10;
        }

        printf("Product of digits is %d\n",product);
}
```
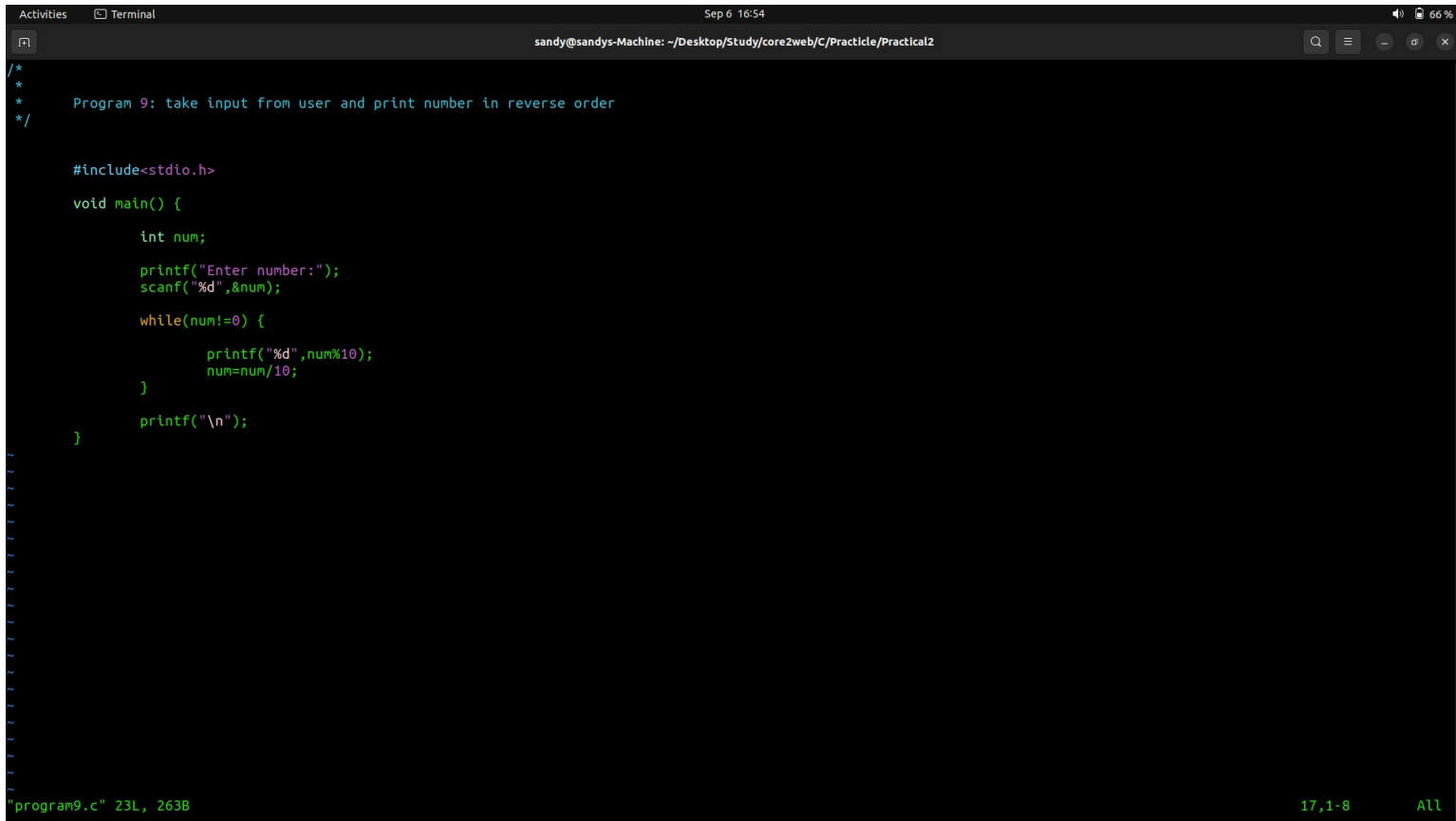


```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program8.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program8.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:15
Product of digits is 5
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:1231
Product of digits is 6
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```

Program 9:

sandy@sandys-Machine: ~/Desktop/Study/core2web/C/Practicle/Practical2

```c
/*
*
*       Program 9: take input from user and print number in reverse order
*/


        #include<stdio.h>

        void main() {

                int num;

                printf("Enter number:");
                scanf("%d",&num);

                while(num!=0) {

                        printf("%d",num%10);
                        num=num/10;
                }

                printf("\n");
        }
```
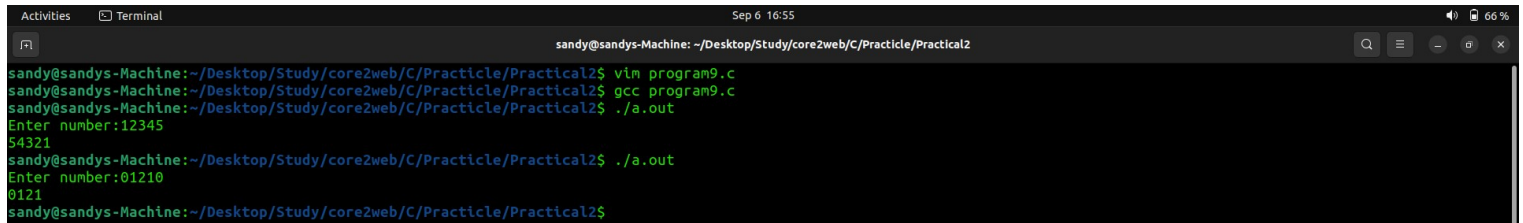
"program9.c" 23L, 263B　　　　　　　　　　　　　　　　　　　　　　　17,1-8　　　All

sandy@sandys-Machine: ~/Desktop/Study/core2web/C/Practicle/Practical2

```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program9.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program9.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:12345
54321
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:01210
0121
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```

Program 10:


```c
/*
 *
 *      Program 10 : Take a number from user and print the fibonacci seris up to that number
 */


        #include<stdio.h>

        void main() {

                int num;
                printf("Enter number:");
                scanf("%d",&num);

                int i=0,j=1,sum=i+j;

                if(num <= 0) {

                        printf("Enter number greater than 1\n");

                }else {
                        printf("%d %d ",i,j);

                        while(sum<=num) {

                                printf("%d ",sum);
                                i = j;
                                j = sum;
                                sum = i+j;
                        }

                        printf("\n");

                }
        }
```

"program10.c" 35L, 439B   21,2-16   All


```
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program10.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ gcc program10.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:10
0 1 1 2 3 5 8
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:16
0 1 1 2 3 5 8 13
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ ./a.out
Enter number:25
0 1 1 2 3 5 8 13 21
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$ vim program10.c
sandy@sandys-Machine:~/Desktop/Study/core2web/C/Practicle/Practical2$
```