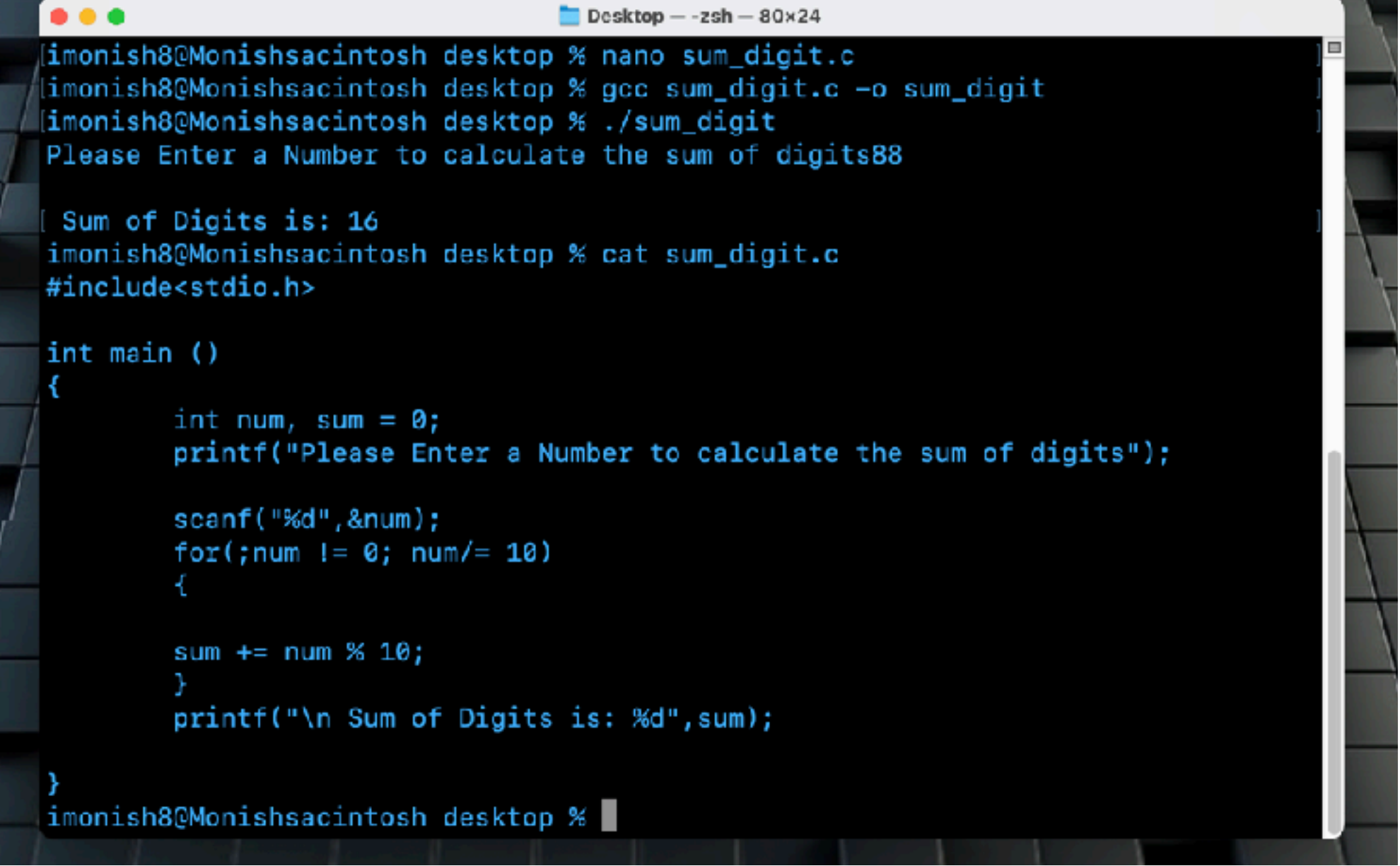
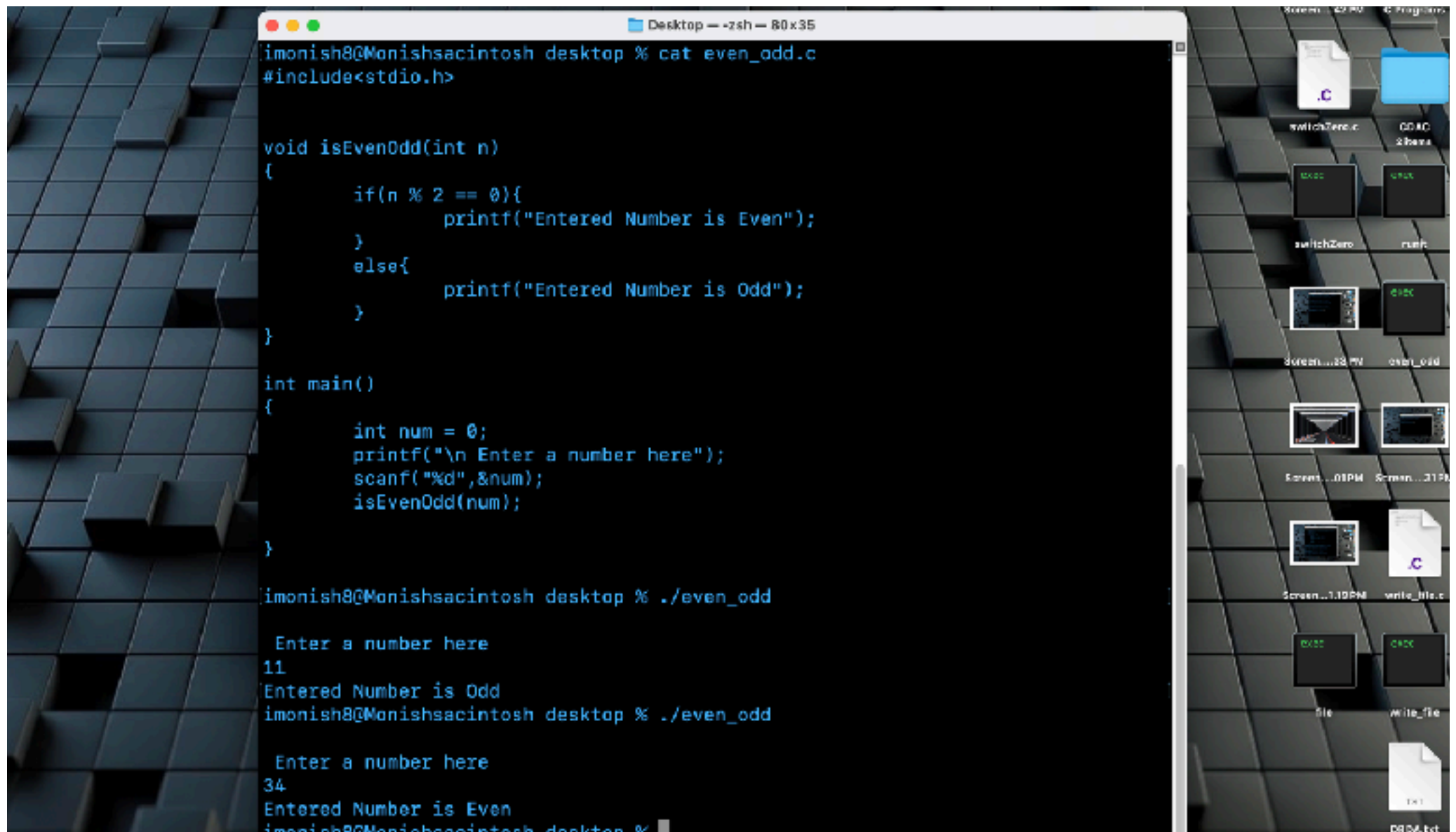


## Sum of Digits -

A terminal window titled "Desktop - zsh - 80x24" is shown. It contains the following text:

```
[imonish8@Monishsacintosh desktop % nano sum_digit.c  
[imonish8@Monishsacintosh desktop % gcc sum_digit.c -o sum_digit  
[imonish8@Monishsacintosh desktop % ./sum_digit  
Please Enter a Number to calculate the sum of digits88  
  
[ Sum of Digits is: 16  
imonish8@Monishsacintosh desktop % cat sum_digit.c  
#include<stdio.h>  
  
int main ()  
{  
    int num, sum = 0;  
    printf("Please Enter a Number to calculate the sum of digits");  
  
    scanf("%d",&num);  
    for(;num != 0; num/= 10)  
    {  
  
        sum += num % 10;  
    }  
    printf("\n Sum of Digits is: %d",sum);  
  
}
```

The prompt is now `imonish8@Monishsacintosh desktop %` with a cursor.



The image shows a macOS desktop environment. On the left, a terminal window titled 'Desktop - zsh - 80x35' displays the source code for a C program named 'even\_odd.c'. The code defines a function 'isEvenOdd' that checks if a number is even or odd using a modulo operation, and a 'main' function that prompts the user for input and calls the function. The terminal shows two successful executions: one with input '11' resulting in 'Entered Number is Odd', and another with input '34' resulting in 'Entered Number is Even'. On the right, a file explorer window shows the desktop contents, including the 'even\_odd.c' file, a folder named 'C Programs', and several screenshot files.

```
imonish8@Monishsacintosh desktop % cat even_odd.c
#include<stdio.h>

void isEvenOdd(int n)
{
    if(n % 2 == 0){
        printf("Entered Number is Even");
    }
    else{
        printf("Entered Number is Odd");
    }
}

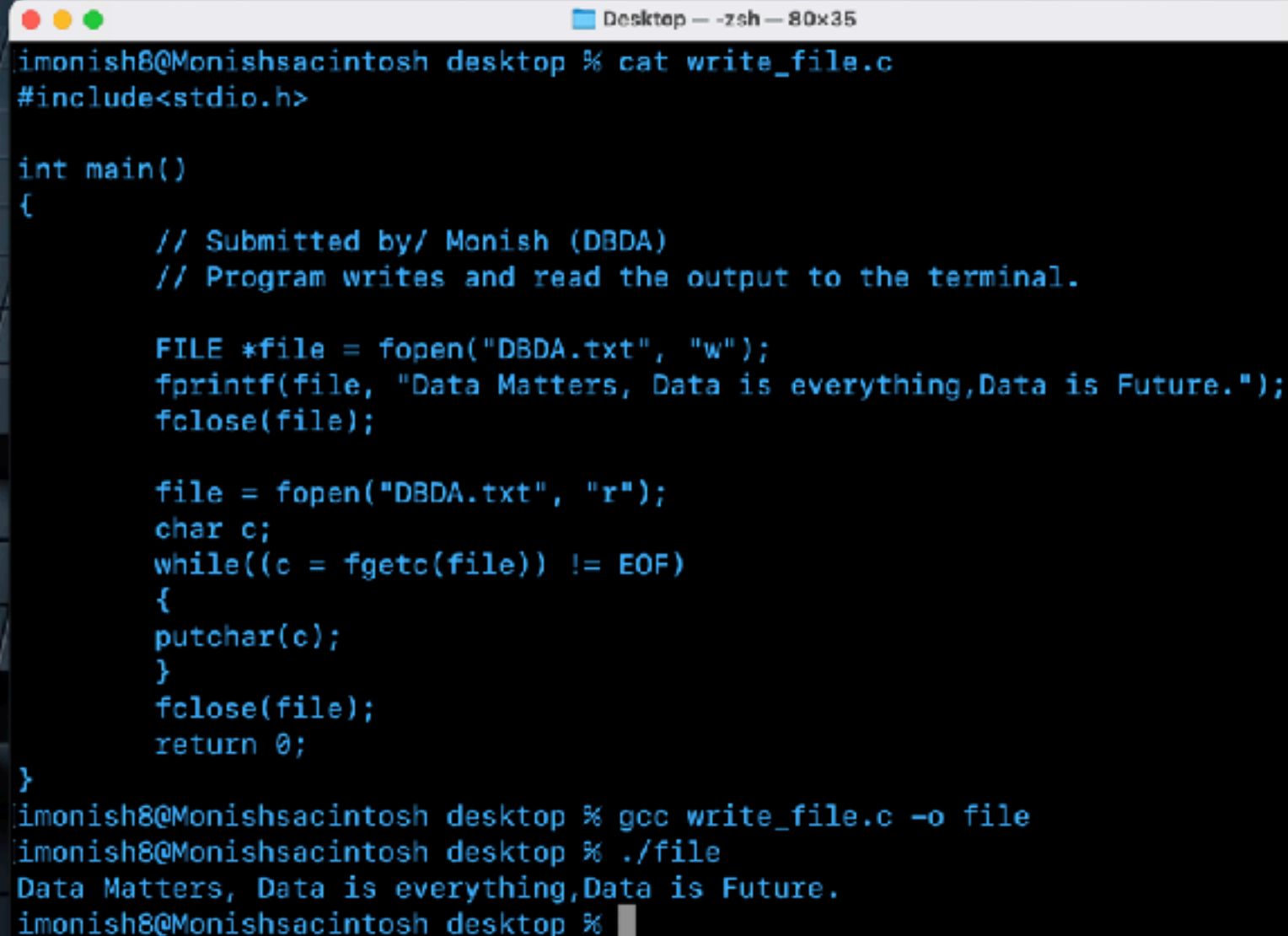
int main()
{
    int num = 0;
    printf("\n Enter a number here");
    scanf("%d",&num);
    isEvenOdd(num);
}

imonish8@Monishsacintosh desktop % ./even_odd

Enter a number here
11
Entered Number is Odd
imonish8@Monishsacintosh desktop % ./even_odd

Enter a number here
34
Entered Number is Even
imonish8@Monishsacintosh desktop %
```

## File Handling



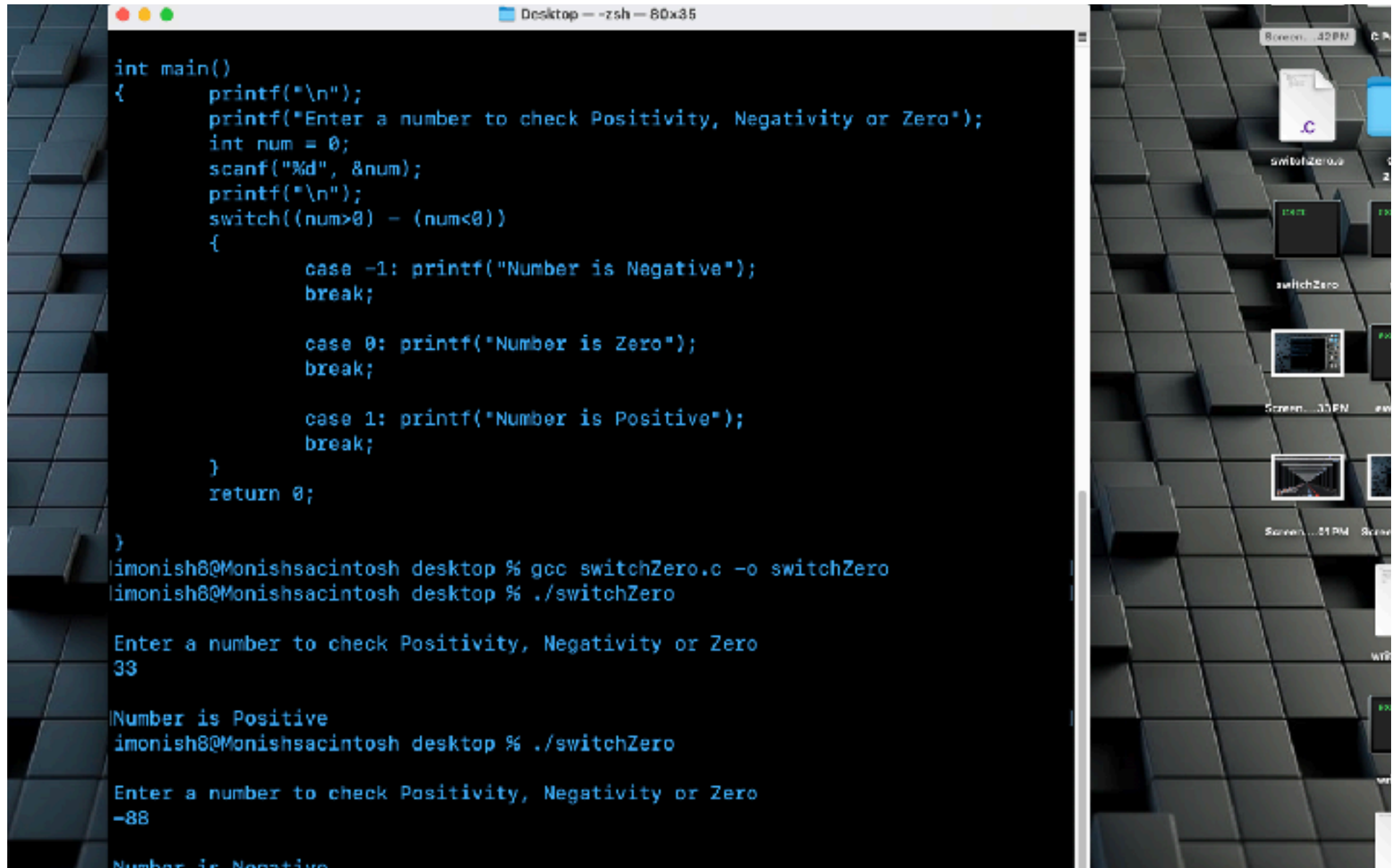
```
Desktop — zsh — 80x35
imonish8@Monishsacintosh desktop % cat write_file.c
#include<stdio.h>

int main()
{
    // Submitted by/ Monish (DBDA)
    // Program writes and read the output to the terminal.

    FILE *file = fopen("DBDA.txt", "w");
    fprintf(file, "Data Matters, Data is everything,Data is Future.");
    fclose(file);

    file = fopen("DBDA.txt", "r");
    char c;
    while((c = fgetc(file)) != EOF)
    {
        putchar(c);
    }
    fclose(file);
    return 0;
}
imonish8@Monishsacintosh desktop % gcc write_file.c -o file
imonish8@Monishsacintosh desktop % ./file
Data Matters, Data is everything,Data is Future.
imonish8@Monishsacintosh desktop %
```

Positivity - Negativity.



```
int main()
{
    printf("\n");
    printf("Enter a number to check Positivity, Negativity or Zero");
    int num = 0;
    scanf("%d", &num);
    printf("\n");
    switch((num>0) - (num<0))
    {
        case -1: printf("Number is Negative");
        break;

        case 0: printf("Number is Zero");
        break;

        case 1: printf("Number is Positive");
        break;
    }
    return 0;
}

|imonish8@Monishsacintosh desktop % gcc switchZero.c -o switchZero
|imonish8@Monishsacintosh desktop % ./switchZero

Enter a number to check Positivity, Negativity or Zero
33

Number is Positive
|imonish8@Monishsacintosh desktop % ./switchZero

Enter a number to check Positivity, Negativity or Zero
-88

Number is Negative
```

TEST SUBMITTED BY MONISH NULE