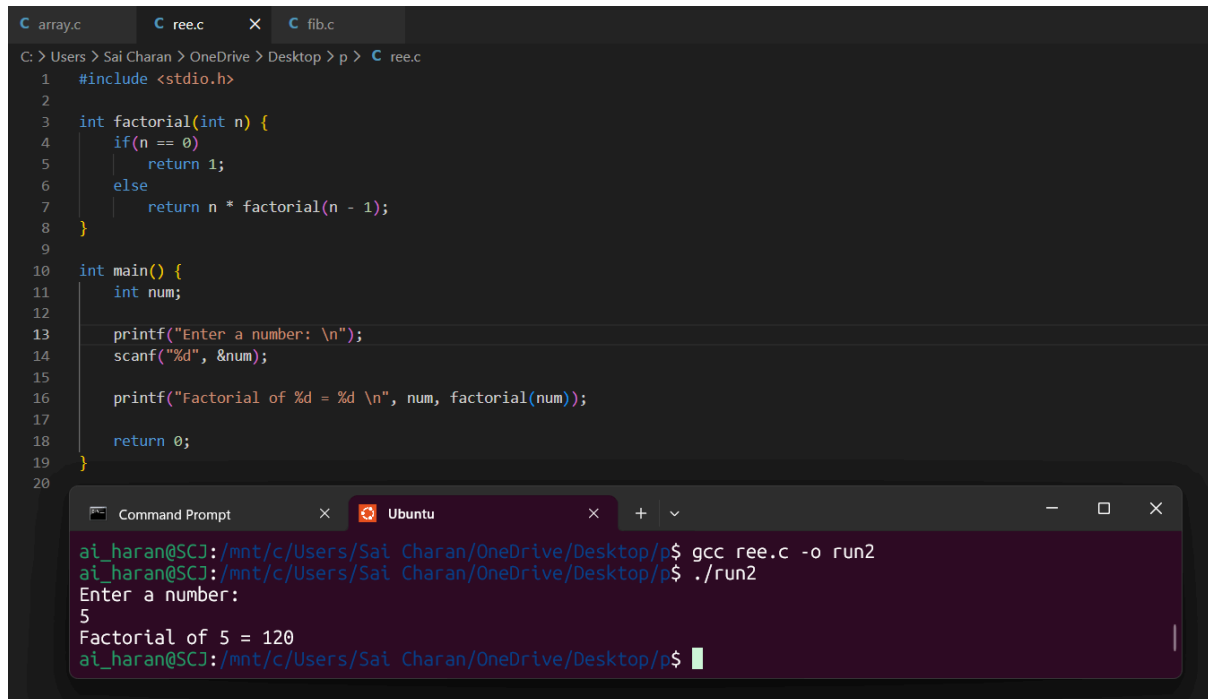


2. Write a program to find the factorial of a number using recursion.

Code with Output:



The image shows a code editor with three tabs: 'array.c', 'ree.c', and 'fib.c'. The 'ree.c' tab is active, displaying a C program that calculates the factorial of a number using recursion. The code is as follows:

```
1 #include <stdio.h>
2
3 int factorial(int n) {
4     if(n == 0)
5         return 1;
6     else
7         return n * factorial(n - 1);
8 }
9
10 int main() {
11     int num;
12
13     printf("Enter a number: \n");
14     scanf("%d", &num);
15
16     printf("Factorial of %d = %d \n", num, factorial(num));
17
18     return 0;
19 }
20
```

Below the code editor, a terminal window titled 'Ubuntu' is open. It shows the compilation and execution of the program:

```
ai_haran@SCJ:/mnt/c/Users/Sai Charan/OneDrive/Desktop/p$ gcc ree.c -o run2
ai_haran@SCJ:/mnt/c/Users/Sai Charan/OneDrive/Desktop/p$ ./run2
Enter a number:
5
Factorial of 5 = 120
ai_haran@SCJ:/mnt/c/Users/Sai Charan/OneDrive/Desktop/p$
```