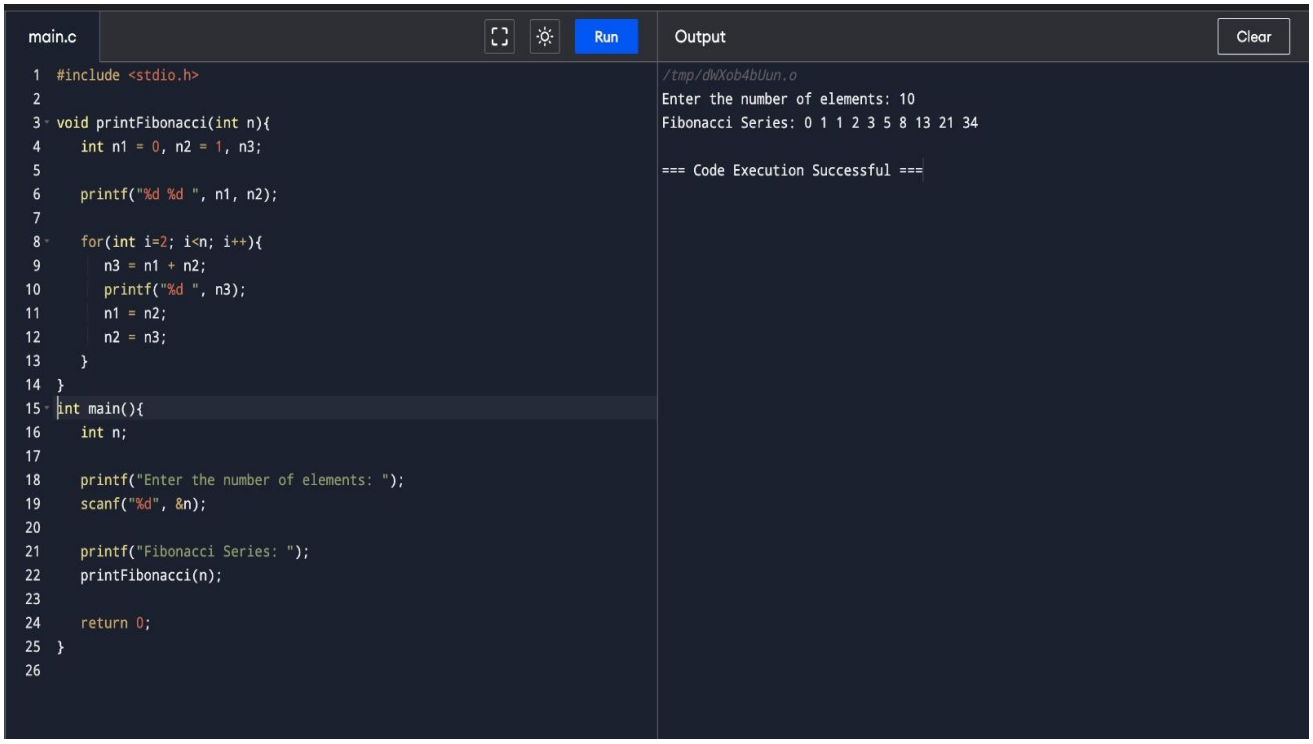
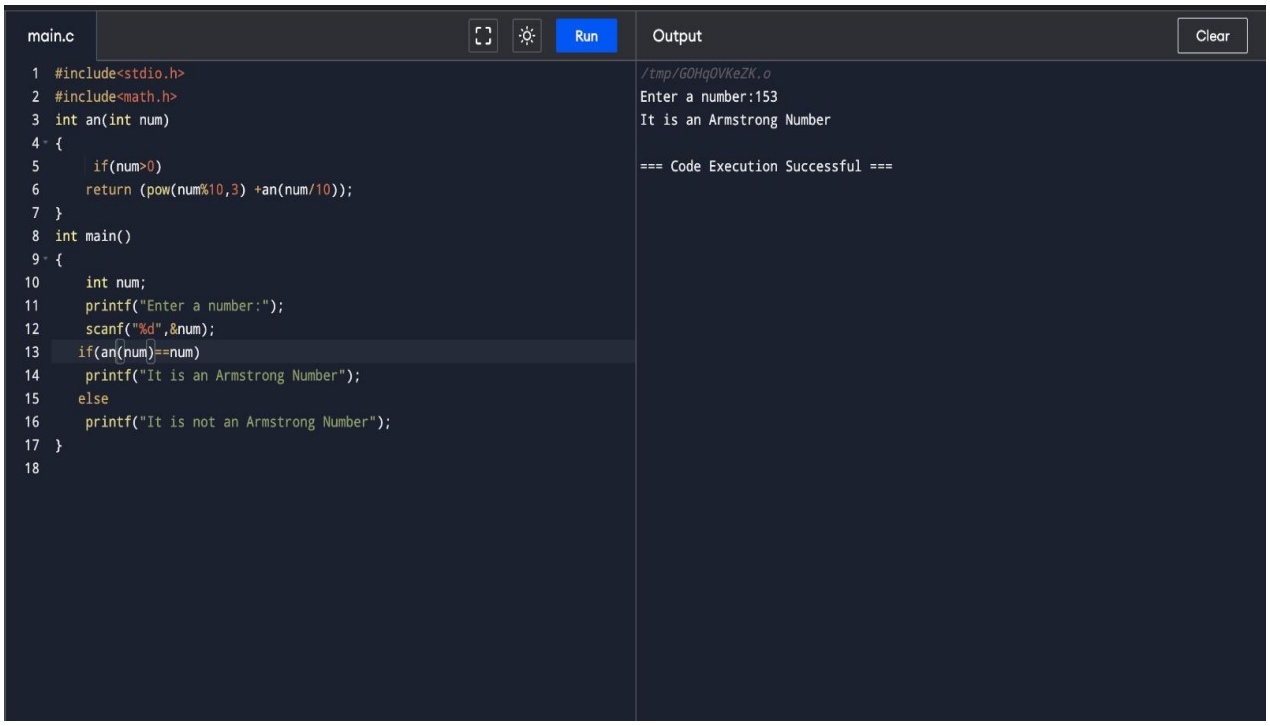
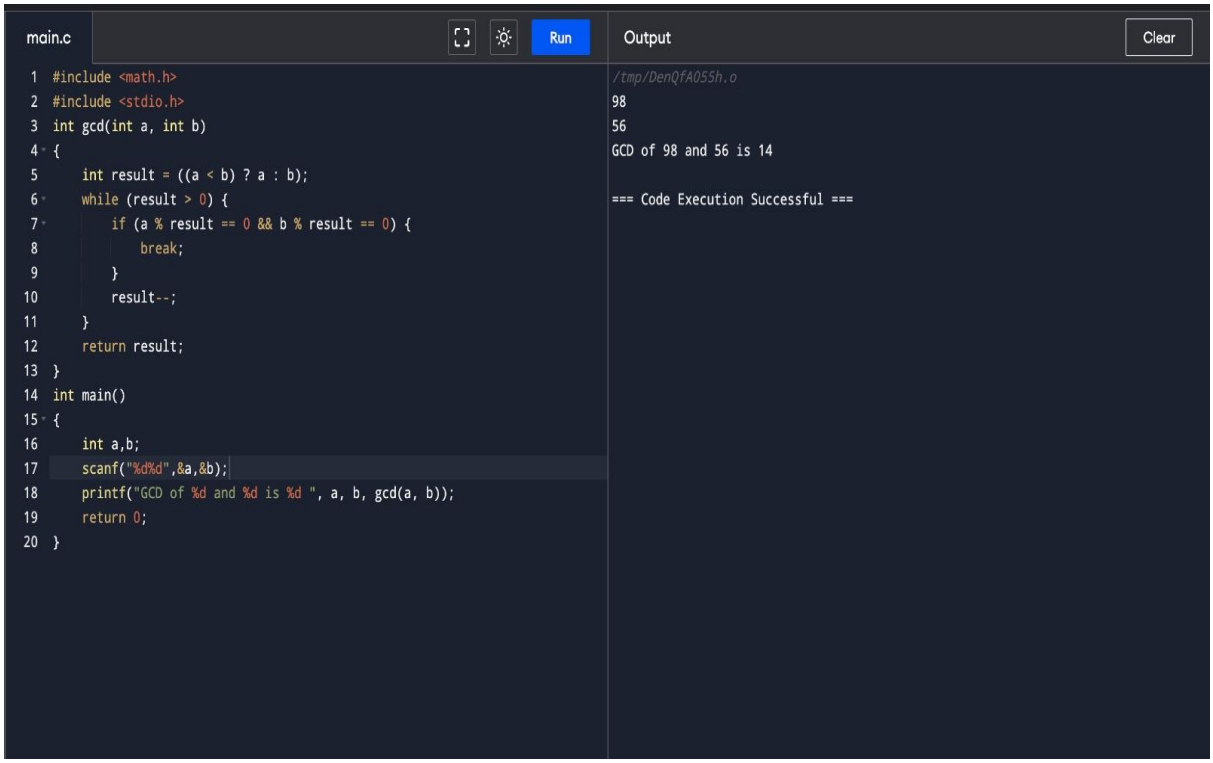
1.Write a program to Print Fibonacci Series using recursion



2. Write a program to check the given no is Armstrong or not using recursive function



3. Write a program to find the GCD of two numbers using recursive function



4. Write a program to get the largest element of an array

main.c

Run

```c
#include <stdio.h>
int largest(int arr[], int n)
{
    int i;
    int max = arr[0];
    for (i = 1; i < n; i++)
        if (arr[i] > max)
            max = arr[i];
    return max;
}
int main()
{
    int arr[] = { 10, 30,40,50,20};
    int n = sizeof(arr) / sizeof(arr[0]);
    printf("Largest in given array is %d", largest(arr, n));
    return 0;
}
```

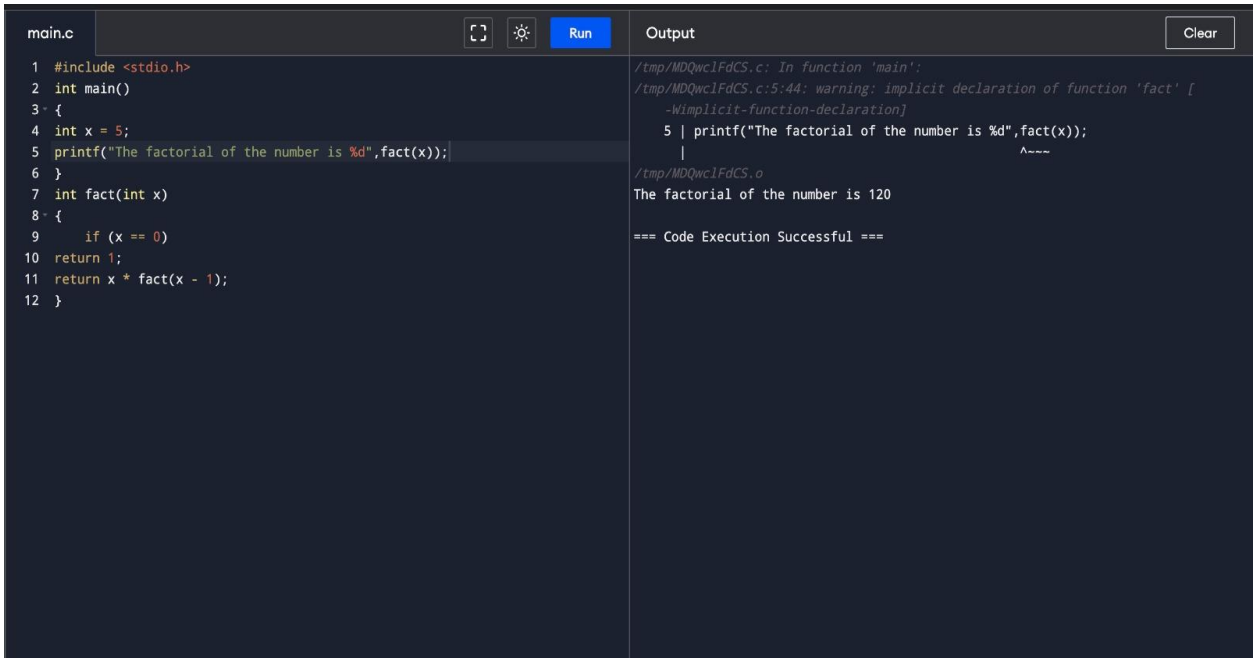
Output

Clear

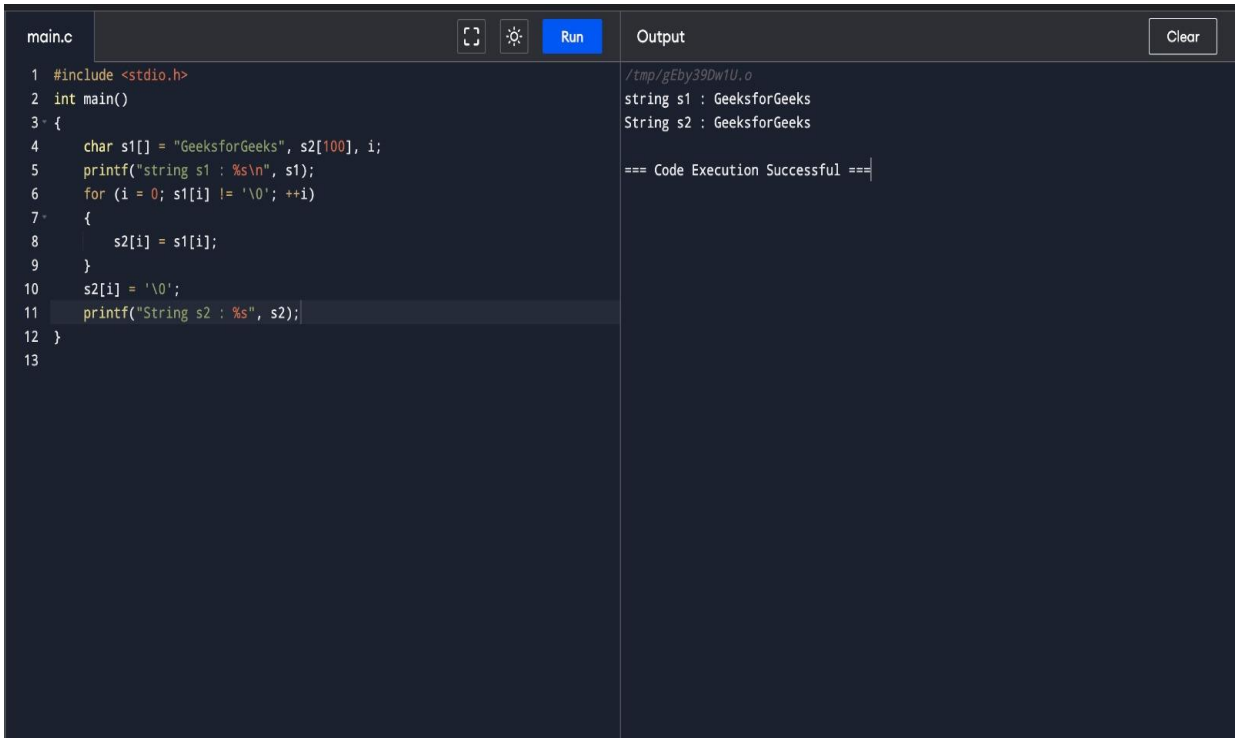
```
/tmp/4EX8UuZGNJ.o
Largest in given array is 50

=== Code Execution Successful ===
```

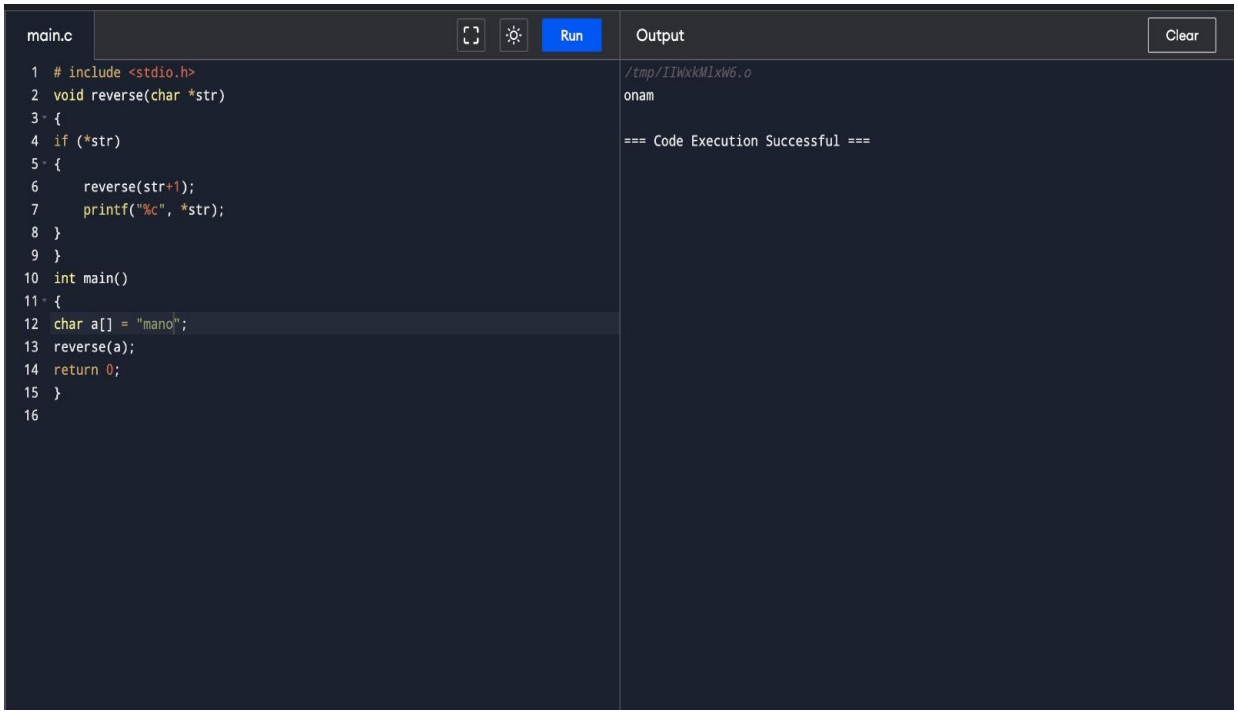
5. Write a program to find the Factorial of a number using recursion



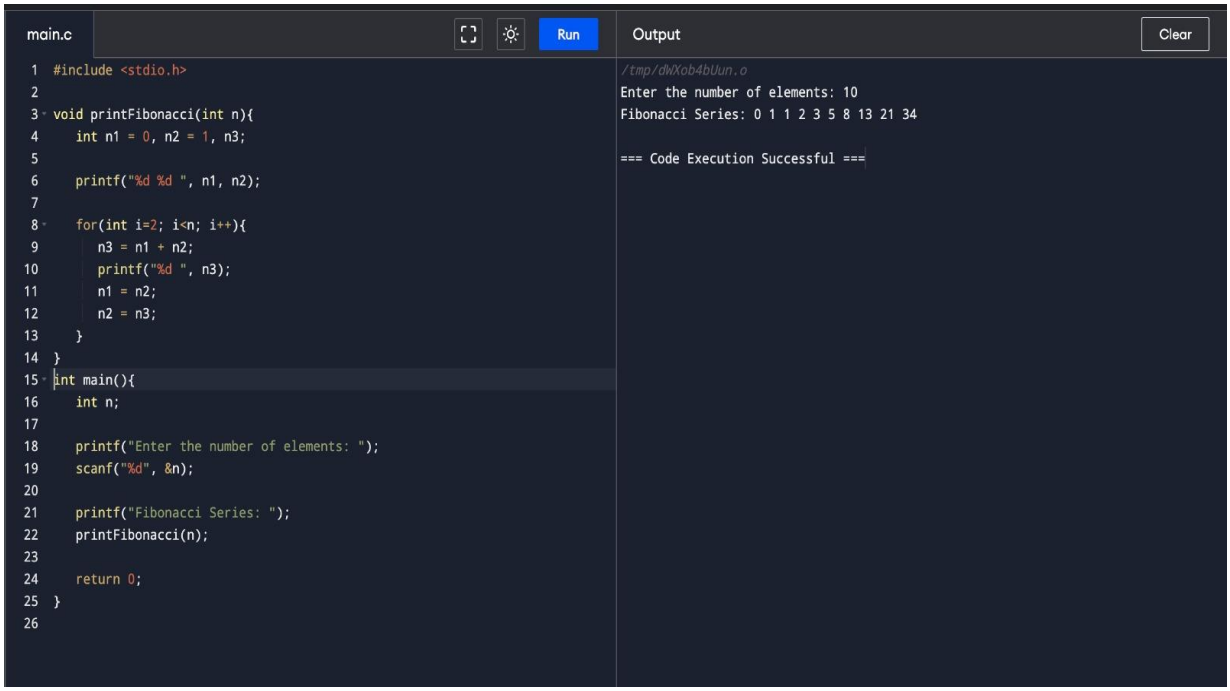
6. Write a program for to copy one string to another using recursion



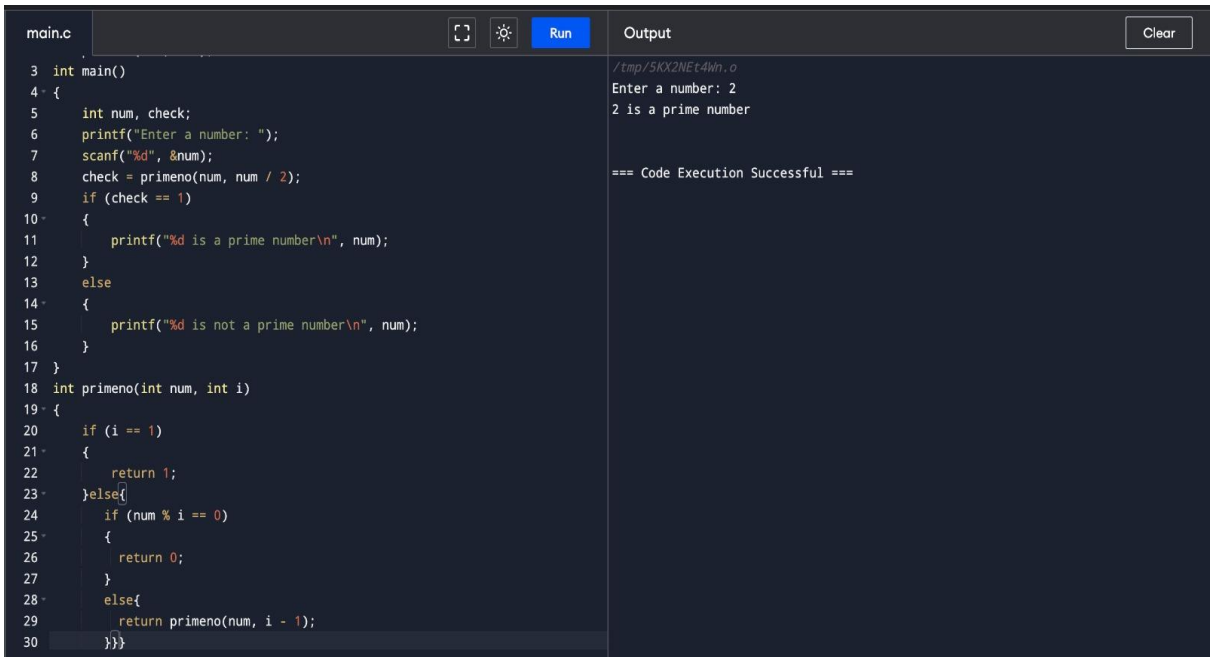
7. Write a program to print the reverse of a string using recursion



8. Write a program to generate all the prime numbers using recursion



9. Write a program to check a number is a prime number or not using recursion.



10. Write a program for to check whether a given String is Palindrome or not using recursion

main.c

Run

```c
#include <string.h>
#include <stdbool.h>
bool isPalRec(char str[], int s, int e)
{
    if (s == e)
    return true;
    if (str[s] != str[e])
    return false;
    if (s < e + 1)
    return isPalRec(str, s + 1, e - 1);
    return true;
}
bool isPalindrome(char str[])
{
int n = strlen(str);
if (n == 0)
    return true;

return isPalRec(str, 0, n - 1);
}
int main()
{
    char str[] = "malayalam";
    if (isPalindrome(str))
    printf("Yes");
    else
    printf("No");
}
```

Output

Clear

```
/tmp/ZcAz696L05.o
Yes

=== Code Execution Successful ===
```