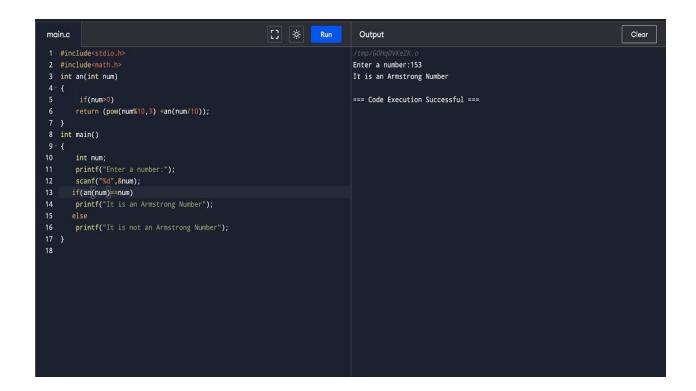
#### 1. Write a program to Print Fibonacci Series using recursion

```
[] 🔅
                                                                                     Output
                                                                                                                                                              Clear
 main.c
 1 #include <stdio.h>
                                                                                   Enter the number of elements: 10
 3 void printFibonacci(int n){
                                                                                   Fibonacci Series: 0 1 1 2 3 5 8 13 21 34
                                                                                   === Code Execution Successful ===
       printf("%d %d ", n1, n2);
         n3 = n1 + n2;
printf("%d ", n3);
         n1 = n2;
n2 = n3;
14 }
15 int main(){
      printf("Enter the number of elements: ");
       printFibonacci(n);
25 }
26
```

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

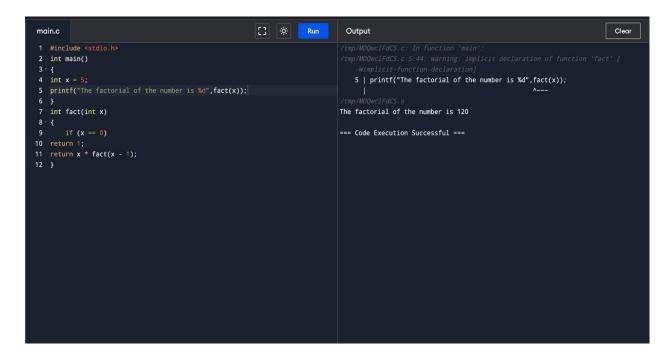


#### 3. Write a program to find the GCD of two numbers using recursive function

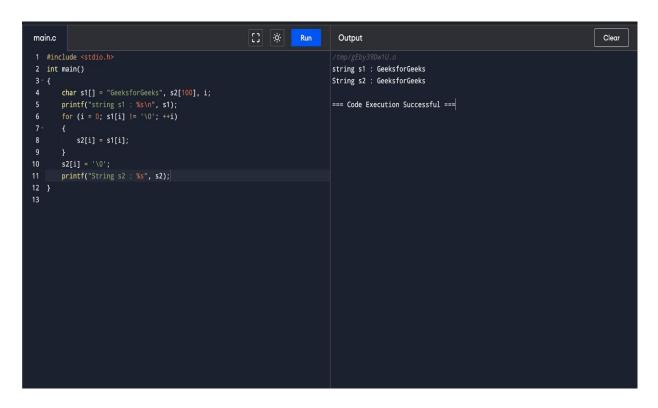
```
[] 🔅 Run
                                                                                                                                                        Clear
main.c
                                                                                 Output
3 int gcd(int a, int b)
                                                                                56
                                                                               GCD of 98 and 56 is 14
       int result = ((a < b) ? a : b);</pre>
       while (result > 0) {
                                                                                === Code Execution Successful ===
          if (a % result == 0 && b % result == 0) {
         result--;
       return result;
14 int main()
16 int a,b;
      scanf("%d%d",&a,&b);
printf("GCD of %d and %d is %d ", a, b, gcd(a, b));
18
19
20 }
```

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

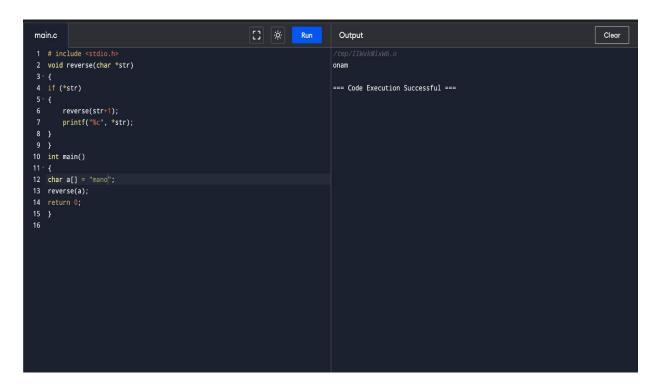
# 5. Write a program to find the Factorial of a number using recursion



# 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.

```
main.c

3 int main()

4-{
5 int num, check;
6 printf("Enter a number: ");
7 scanf("%d', Anum);
8 check = primeno(num, num / 2);
9 if (check == 1)
10- {
11 printf("%d is a prime number\n", num);
12 }
13 else
14- {
15 printf("%d is not a prime number\n", num);
16 }
17 }
18 int primeno(int num, int i)
19- {
20 if (i == 1)
21- {
22 return 1;
23- }else(
24 if (num % i == 0)
25- {
26 return 0;
27 }
28- else(
29 return primeno(num, i - 1);
30 })))
```

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

```
[] 🔅 Run
                                                                                                                                                                                                    Clear
main.c
                                                                                                         Output
 2 #include <string.h>
3 #include <stdbool.h>
                                                                                                       Yes
 4 bool isPalRec(char str[], int s, int e)
                                                                                                       === Code Execution Successful ===
         return true;
if (str[s] != str[e])
         return false;
if (s < e + 1)</pre>
         return isPalRec(str, s + 1, e - 1);
13 }
14 bool isPalindrome(char str[])
15 {
16 int n = strlen(str);
17 if (n == 0)
18 return true;
20 return isPalRec(str, 0, n - 1);
22 int main()
23 {
24 char st
25 if (isP
          if (isPalindrome(str))
26
27
28
29 }
         printf("No");
```