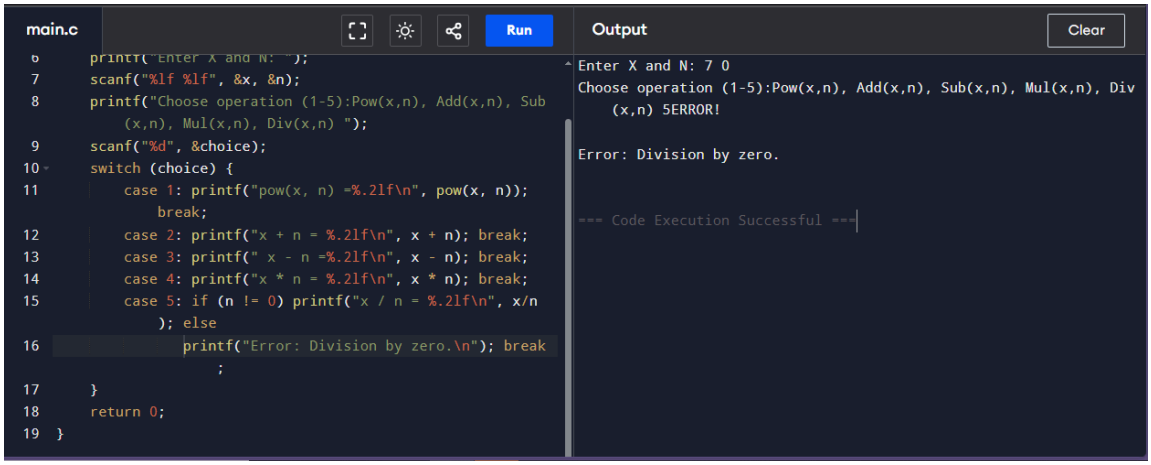
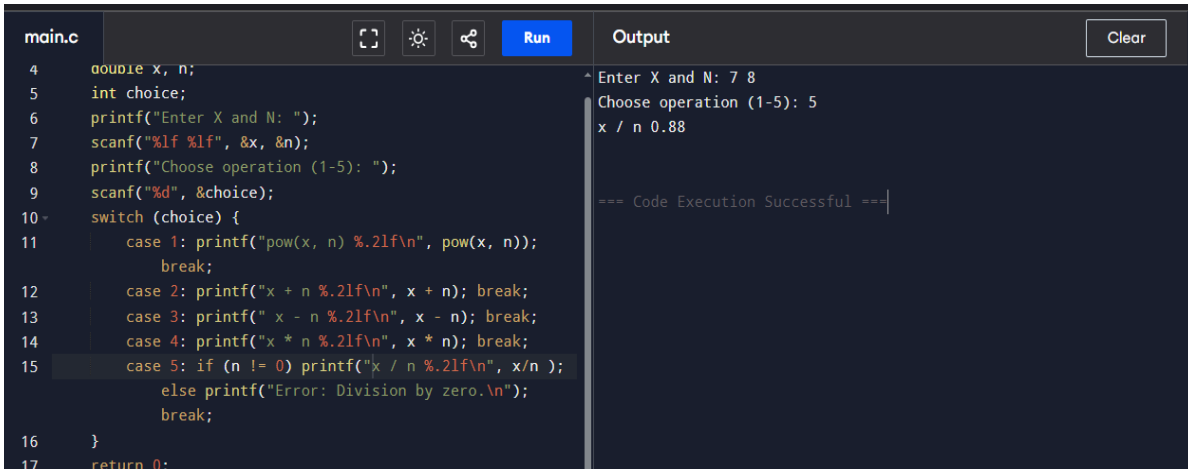
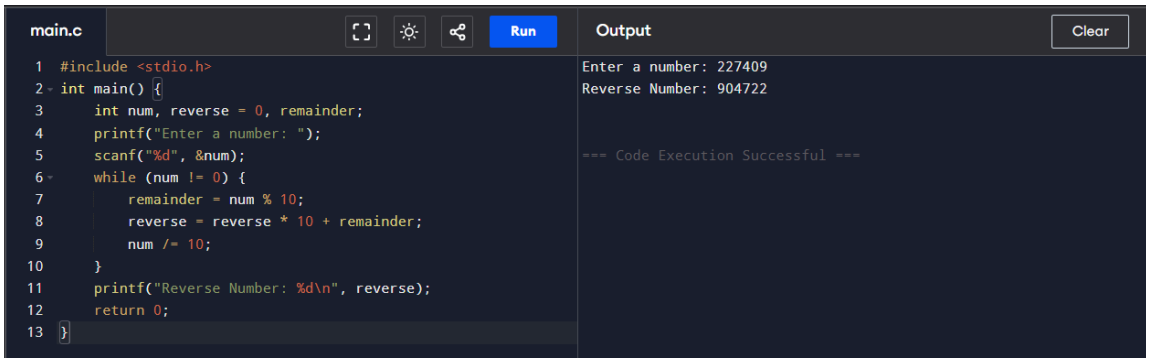
Ex 1 Pow(x,n), Add(x,n), Sub(x,n), Mul(x,n), Div(x,n),

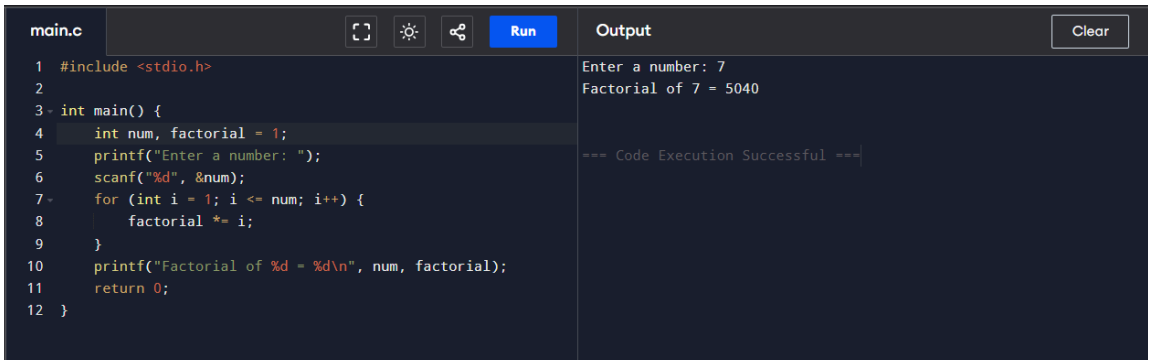




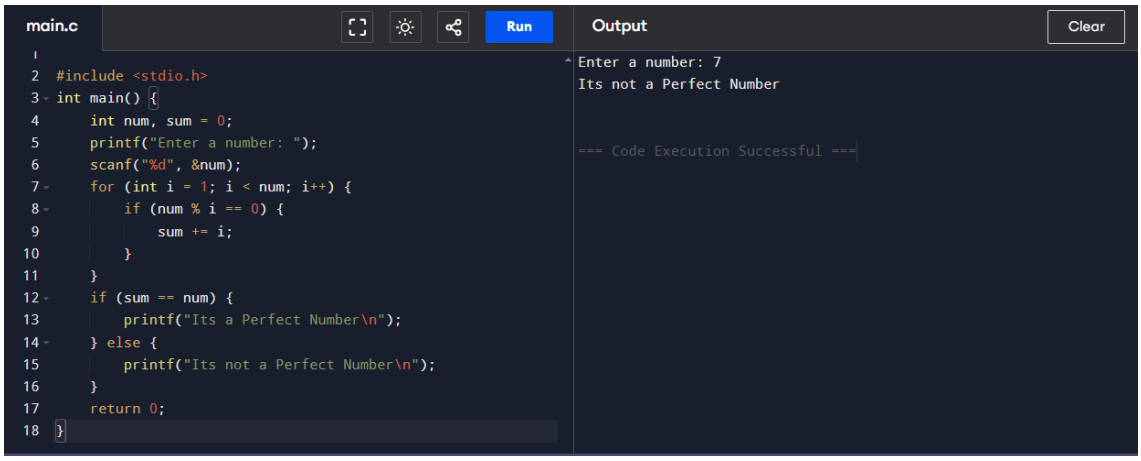
Ex 2 reverse the no.



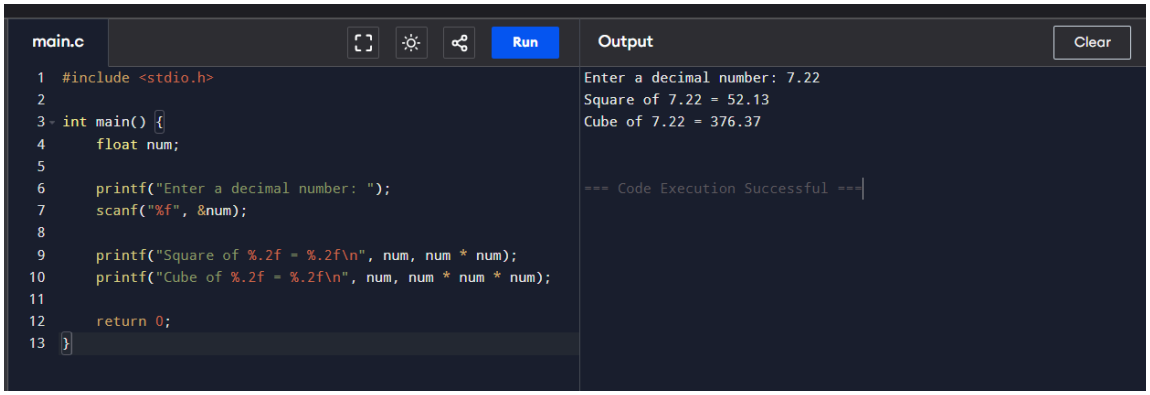
Ex 3 factorial of N



Ex 4 perfect no.

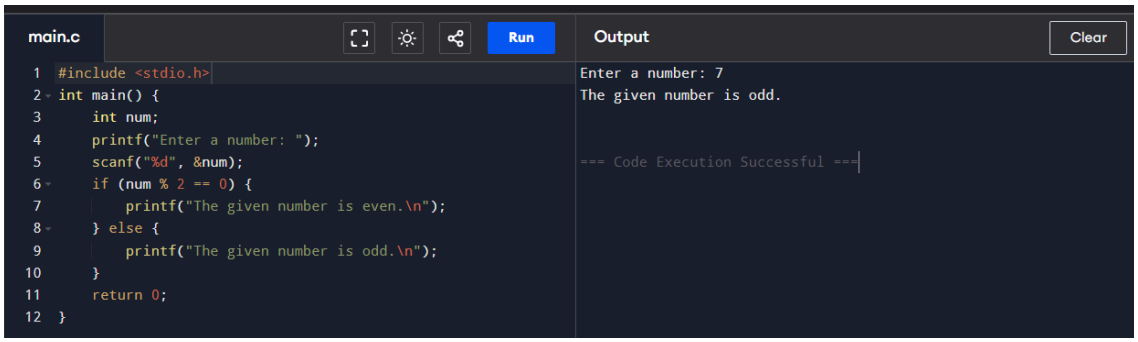


Ex 5 square and cube of a no.

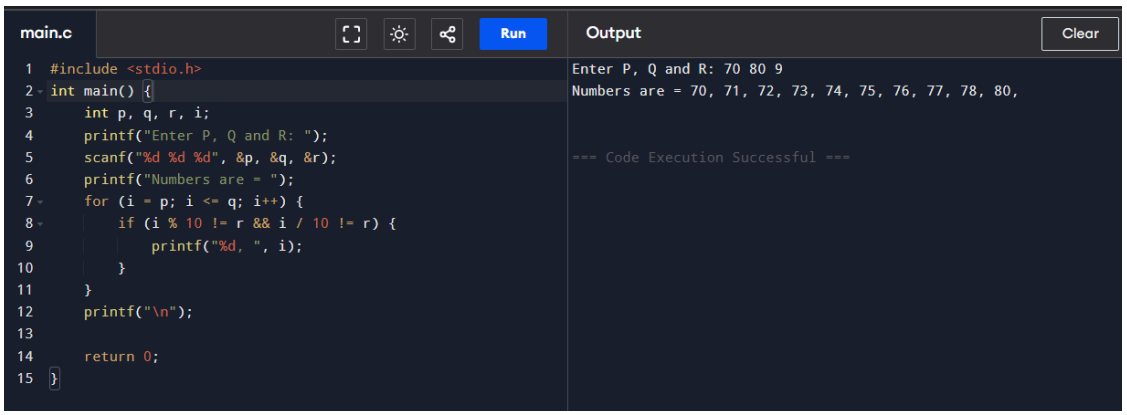


Ex 6 vote eligible

Ex 7 odd or even no.s



Ex 8 range of no. without the value that represented in the R



Ex 9 no. of rows

main.c

```c
#include <stdio.h>
int main() {
    int rows, i, j;
    printf("Enter the number of rows: ");
    scanf("%d", &rows);
    for (i = 1; i <= rows; i++) {
        for (j = i; j >= 1; j--) {
            printf("%d ", j);
        }
        printf("\n");
    }
    return 0;
}
```

Output

```
Enter the number of rows: 7
1
2 1
3 2 1
4 3 2 1
5 4 3 2 1
6 5 4 3 2 1
7 6 5 4 3 2 1


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

Ex 10 printing repeated no. in pattern

main.c

```c
#include <stdio.h>
int main() {
    int n, i, j;
    printf("Enter the number of lines: ");
    scanf("%d", &n);
    for (i = 1; i <= n; i++) {
        for (j = 1; j <= i; j++) {
            printf("%d ", i);
        }
        printf("\n");
    }
    return 0;
}
```

Output

```
Enter the number of lines: 7
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
6 6 6 6 6 6
7 7 7 7 7 7 7


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

Ex 11 tables

main.c

```c
#include <stdio.h>
int main() {
    int m, n, i;
    printf("Enter M and N: ");
    scanf("%d %d", &m, &n);
    for (i = 1; i <= n; i++) {
        printf("%dx%d=%d \n", m, i, i * m);
    }
    return 0;
}
```

Output

```
Enter M and N: 7   5
7x1=7
7x2=14
7x3=21
7x4=28
7x5=35


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

Ex 12 composites no.

main.c

```c
#include <stdio.h>
int main() {
    int arr[] = {16, 18, 27, 16, 23, 21, 19};
    int n = sizeof(arr) / sizeof(arr[0]);
    int count = 0, i;
    for (i = 0; i < n; i++) {
        for (int j = 2; j * j <= arr[i]; j++) {
            if (arr[i] % j == 0) {
                count++;
                break;
            }
        }
    }
    printf("Number of Composite Numbers = %d\n", count);
    return 0;
}
```

Output

```
Number of Composite Numbers = 5


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

Ex 13 no. of negative no.s

main.c

```c
#include <stdio.h>
int main() {
    int arr[] = {16, -18, 27, -16, 23, -21, 19};
    int n = sizeof(arr) / sizeof(arr[0]);
    int count = 0, i;
    for (i = 0; i < n; i++) {
        if (arr[i] < 0) count++;
    }
    printf("Number of negative numbers = %d\n", count);
    return 0;
}
```

Output

```
Number of negative numbers = 3


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

Ex 14 reverse array

main.c

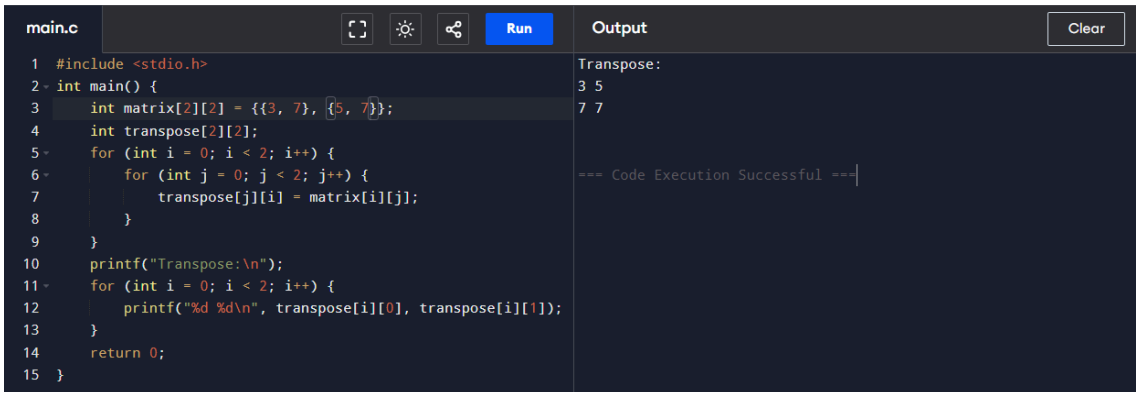
```c
#include <stdio.h>
int main() {
    int arr[] = {16, 18, 27, 16, 23, 21, 19};
    int n = sizeof(arr) / sizeof(arr[0]);
    int i, j, temp;
    for (i = 0, j = n - 1; i < j; i++, j--) {
        temp = arr[i];
        arr[i] = arr[j];
        arr[j] = temp;
    }
    printf("Reverse Array: ");
    for (i = 0; i < n; i++) {
        printf("%d ", arr[i]);
    }
    return 0;
}
```

Output

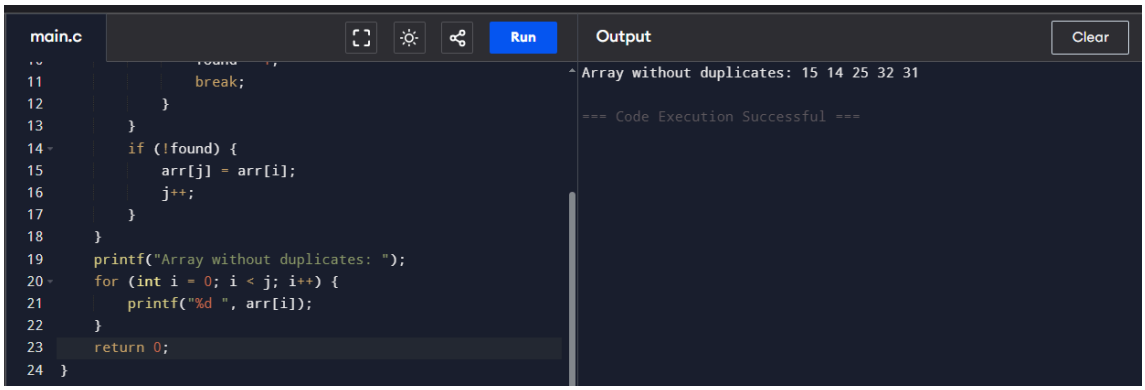
```
Reverse Array: 19 21 23 16 27 18 16

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

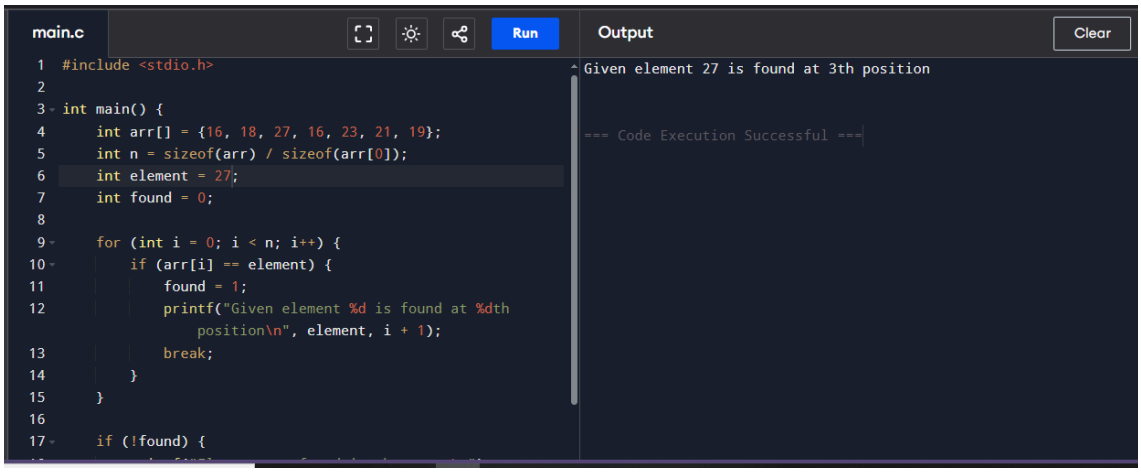
Ex 15 transpose of matrix



Ex 16 array without duplicate



Ex 17 search of the element in an array



Ex 18 adding 2 no.

main.c

```c
#include <stdio.h>
int main() {
    int num1, num2, sum;
    int *ptr1, *ptr2, *ptr3;
    ptr1 = &num1;
    ptr2 = &num2;
    ptr3 = &sum;
    printf("Input the first number : ");
    scanf("%d", ptr1);
    printf("Input the second number : ");
    scanf("%d", ptr2);
    *ptr3 = *ptr1 + *ptr2;
    printf("The sum of the entered numbers is : %d\n", *ptr3
        );
    return 0;
}
```

Output

```
Input the first number : 2
Input the second number : 7
The sum of the entered numbers is : 9


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

Ex 19 max number

main.c

```c
#include <stdio.h>
int main() {
    int a, b, *max;
    printf("Input the first number : ");
    scanf("%d", &a);
    printf("Input the second number : ");
    scanf("%d", &b);
    if (a > b) {
        max = &a;
    } else {
        max = &b;
    }
    printf("%d is the maximum number.\n", *max);
    return 0;
}
```

Output

```
Input the first number : 77
Input the second number : 7
77 is the maximum number.


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

Ex 20 largest no. in array or elements

main.c

```c
#include <stdio.h>
#include <stdlib.h>
int main() {
    int n;
    float *arr, max;
    printf("Input total number of elements: ");
    scanf("%d", &n);
    arr = (float*)malloc(n * sizeof(float));
    for (int i = 0; i < n; i++) {
        printf("Number %d: ", i + 1);
        scanf("%f", &arr[i]);
        if (i == 0 || arr[i] > max) max = arr[i];
    }
    printf("The Largest element is : %.2f\n", max);
    return 0;
}
```

Output

```
Input total number of elements: 7
Number 1: 7
Number 2: 4
Number 3: 5
Number 4: 3
Number 5: 2
Number 6: 1
Number 7: 0
The Largest element is : 7.00


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