main.c

Share Run

```c
#include <stdio.h>

int main() {
    int m, n, p, q;
    printf("Enter rows and columns of first matrix: ");
    scanf("%d %d", &m, &n);
    printf("Enter rows and columns of second matrix: ");
    scanf("%d %d", &p, &q);

    if (n != p) {
        printf("Matrix multiplication not possible!\n");
        return 0;
    }

    int a[m][n], b[p][q], c[m][q];

    printf("Enter elements of first matrix:\n");
    for (int i = 0; i < m; i++)
```

Output

Clear

```
Enter rows and columns of first matrix: 2 2
Enter rows and columns of second matrix: 2 2
Enter elements of first matrix:
1 3
4 5
Enter elements of second matrix:
6 7
8 9
Resultant Matrix:
30 34
64 73


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

main.c

Share Run

```c
#include <stdio.h>
int main() {
    int n;
    printf("Enter how many numbers you want to check: ");
    scanf("%d", &n);

    int arr[n];
    printf("Enter %d numbers:\n", n);
    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }
    printf("\nResult:\n");
    for (int i = 0; i < n; i++) {
        if (arr[i] % 2 == 0)
            printf("%d is Even\n", arr[i]);
        else
            printf("%d is Odd\n", arr[i]);
    }
```

Output Clear

```
Enter how many numbers you want to check: 4
Enter 4 numbers:
4
5
6
7

Result:
4 is Even
5 is Odd
6 is Even
7 is Odd


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

main.c

Share Run

```c
#include <stdio.h>
int main() {
    int n;
    unsigned long long fact = 1;  // factorial grows fast
    printf("Enter a number: ");
    scanf("%d", &n);
    if (n < 0) {
        printf("Factorial is not defined for negative numbers.\n"
            );
    } else {
        for (int i = 1; i <= n; i++) {
            fact *= i;
        }
        printf("Factorial of %d = %llu\n", n, fact);
    }
    return 0;
}

```

Output Clear

```
Enter a number: 4
Factorial of 4 = 24


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

main.c

Share Run

```c
#include <stdio.h>
int main() {
    int n, first = 0, second = 1, next;
    printf("Enter the number of terms: ");
    scanf("%d", &n);
    if (n <= 0) {
        printf("Please enter a positive number.\n");
        return 0;
    }
    printf("Fibonacci Series: ");
    for (int i = 1; i <= n; i++) {
        printf("%d ", first);
        next = first + second;
        first = second;
        second = next;
    }
    printf("\n");
    return 0;
```

Output Clear

```
Enter the number of terms: 5
Fibonacci Series: 0 1 1 2 3


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

main.c

Share Run

```c
#include <stdio.h>
unsigned long long factorial(int n) {
    if (n == 0 || n == 1)
        return 1;
    else
        return n * factorial(n - 1);
}
int main() {
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    if (num < 0)
        printf("Factorial is not defined for negative numbers
            .\n");
    else
        printf("Factorial of %d = %llu\n", num, factorial(num));
    return 0;
}
```

Output Clear

```
Enter a number: 5
Factorial of 5 = 120


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

main.c

Share Run

```c
#include <stdio.h>
int fibonacci(int n) {
    if (n == 0)
        return 0;
    else if (n == 1)
        return 1;
    else
        return fibonacci(n - 1) + fibonacci(n - 2);
}
int main() {
    int n;
    printf("Enter the number of terms: ");
    scanf("%d", &n);
    if (n <= 0) {
        printf("Please enter a positive number.\n");
        return 0;
    }
    printf("Fibonacci Series: ");
```

Output

Clear

```
Enter the number of terms: 6
Fibonacci Series: 0 1 1 2 3 5


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

main.c

Share Run

```c
#include <stdio.h>
#define SIZE 100
int main() {
    int arr[SIZE], n, choice, pos, value;
    printf("Enter number of elements: ");
    scanf("%d", &n);
    printf("Enter %d elements:\n", n);
    for (int i = 0; i < n; i++)
        scanf("%d", &arr[i]);
    while (1) {
        printf("\n--- Array Operations Menu ---\n");
        printf("1. Display\n");
        printf("2. Insert\n");
        printf("3. Delete\n");
        printf("4. Exit\n");
        printf("Enter your choice: ");
        scanf("%d", &choice);
        switch (choice) {
```

Output Clear

```
Enter number of elements: 5
Enter 5 elements:
5 6 4 2 7

--- Array Operations Menu ---
1. Display
2. Insert
3. Delete
4. Exit
Enter your choice: 2
Enter position (1 to 6): 4
Enter value to insert: 2
Value inserted.

--- Array Operations Menu ---
1. Display
2. Insert
3. Delete
```

main.c

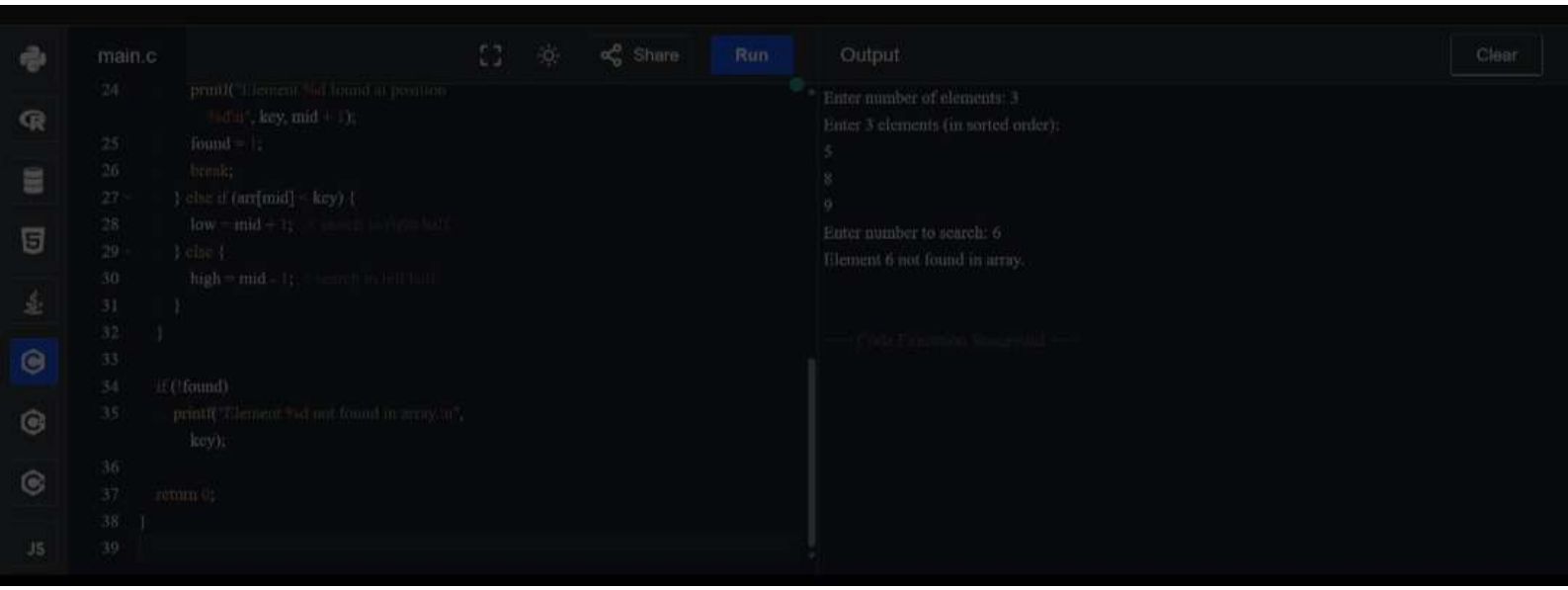
Share Run

```c
#include <stdio.h>
int main() {
    int n, key, found = 0;
    printf("Enter number of elements: ");
    scanf("%d", &n);
    int arr[n];
    printf("Enter %d elements:\n", n);
    for (int i = 0; i < n; i++)
        scanf("%d", &arr[i]);
    printf("Enter number to search: ");
    scanf("%d", &key);
    for (int i = 0; i < n; i++) {
        if (arr[i] == key) {
            printf("Element %d found at position %d\n", key, i +
                1);
            found = 1;
            break;
        }
```

Output Clear

```
Enter number of elements: 4
Enter 4 elements:
5 6 7 8
Enter number to search: 6
Element 6 found at position 2


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


main.c
Share
Run
Output
Clear
printf("Element %d found at position
%d\n", key, mid + 1);
found = 1;
break;
} else if (arr[mid] < key) {
low = mid + 1;
} else {
high = mid - 1;
}
}
if (!found)
printf("Element %d not found in array.\n",
key);
return 0;
}
Enter number of elements: 3
Enter 3 elements (in sorted order):
5
8
9
Enter number to search: 6
Element 6 not found in array.