```c
#include <stdio.h>

int main() {
    printf("Hello, World!\n");
    return 0;
}
```

Calculator- Addition:

```c
#include <stdio.h>

int main() {
    int num1, num2, sum;
    printf("Enter two numbers: ");
    scanf("%d %d", &num1, &num2);

    sum = num1 + num2;

    printf("Sum: %d\n", sum);
    return 0;
}
```

Simple Interest Calculator:

```c
#include <stdio.h>

int main() {
    float principal, rate, time, simple_interest;

    printf("Enter principal amount, rate of interest, and time: ");
    scanf("%f %f %f", &principal, &rate, &time);

    simple_interest = (principal * rate * time) / 100;

    printf("Simple Interest: %f\n", simple_interest);
    return 0;
```

```
}
```
Temperature Converter:

```
#include <stdio.h>

int main() {
    float celsius, fahrenheit;

    printf("Enter temperature in Celsius: ");
    scanf("%f", &celsius);

    fahrenheit = (celsius * 9 / 5) + 32;

    printf("Temperature in Fahrenheit: %f\n", fahrenheit);
    return 0;
}
```
Check Even or Odd:

```
#include <stdio.h>

int main() {
    int num;

    printf("Enter a number: ");
    scanf("%d", &num);

    if (num % 2 == 0)
        printf("%d is even.\n", num);
    else
        printf("%d is odd.\n", num);

    return 0;
}
```
Factorial Calculator:

```c
#include <stdio.h>

int main() {
    int num, factorial = 1;

    printf("Enter a number: ");
    scanf("%d", &num);

    for (int i = 1; i <= num; i++)
        factorial *= i;

    printf("Factorial of %d: %d\n", num, factorial);
    return 0;
}
```

Palindrome Checker:

```c
#include <stdio.h>
#include <stdbool.h>

bool isPalindrome(int num) {
    int original = num, reverse = 0, remainder;

    while (num != 0) {
        remainder = num % 10;
        reverse = reverse * 10 + remainder;
        num /= 10;
    }

    return original == reverse;
}

int main() {
    int num;
```

```
    printf("Enter a number: ");
    scanf("%d", &num);

    if (isPalindrome(num))
        printf("%d is a palindrome.\n", num);
    else
        printf("%d is not a palindrome.\n", num);

    return 0;
}
```

Maximum of Three Numbers:

```
#include <stdio.h>

int findMax(int a, int b, int c) {
    int max = a;

    if (b > max)
        max = b;
    if (c > max)
        max = c;

    return max;
}

int main() {
    int num1, num2, num3;

    printf("Enter three numbers: ");
    scanf("%d %d %d", &num1, &num2, &num3);

    printf("Maximum: %d\n", findMax(num1, num2, num3));
    return 0;
}
```

Linear Search in an Array:

```
#include <stdio.h>

int linearSearch(int arr[], int size, int key) {
    for (int i = 0; i < size; i++) {
        if (arr[i] == key)
            return i;
    }
    return-1;
}

int main() {
    int size, key;

    printf("Enter size of the array: ");
    scanf("%d", &size);

    int arr[size];

    printf("Enter elements of the array: ");
    for (int i = 0; i < size; i++)
        scanf("%d", &arr[i]);

    printf("Enter key to search: ");
    scanf("%d", &key);

    int index = linearSearch(arr, size, key);

    if (index !=-1)
        printf("%d found at index %d.\n", key, index);
    else
        printf("%d not found in the array.\n", key);

    return 0;
```

```
}
```

Bubble Sort:

```
#include <stdio.h>

void bubbleSort(int arr[], int size) {
    for (int i = 0; i < size- 1; i++) {
        for (int j = 0; j < size- i- 1; j++) {
            if (arr[j] > arr[j + 1]) {
                // Swap arr[j] and arr[j+1]
                int temp = arr[j];
                arr[j] = arr[j + 1];
                arr[j + 1] = temp;
            }
        }
    }
}

int main() {
    int size;

    printf("Enter size of the array: ");
    scanf("%d", &size);

    int arr[size];

    printf("Enter elements of the array: ");
    for (int i = 0; i < size; i++)
        scanf("%d", &arr[i]);

    bubbleSort(arr, size);

    printf("Sorted array: ");
    for (int i = 0; i < size; i++)
        printf("%d ", arr[i]);
```

```
    printf("\n");
    return 0;
}
```

Matrix Multiplication:

```
#include <stdio.h>

void matrixMultiplication(int a[10][10], int b[10][10], int result[10][10], int m, int n, int p)
{
    for (int i = 0; i < m; i++) {
        for (int j = 0; j < p; j++) {
            result[i][j] = 0;
            for (int k = 0; k < n; k++) {
                result[i][j] += a[i][k] * b[k][j];
            }
        }
    }
}

int main() {
    int m, n, p;

    printf("Enter dimensions of matrices A and B (m n p): ");
    scanf("%d %d %d", &m, &n, &p);

    int a[10][10], b[10][10], result[10][10];

    printf("Enter elements of matrix A: ");
    for
```