1. Quadratic Eq.

```
Enter the coefficients of x^2, x and constant: 1 -5 4
Roots are real and distinct.
The roots are 4.00 and 1.00

Process returned 0 (0x0)   execution time : 5.220 s
Press any key to continue.
```

```
Enter the coefficients of x^2, x and constant: 1 -4 4
Roots are real and equal.
The roots are 2.00 and 2.00

Process returned 0 (0x0)   execution time : 7.385 s
Press any key to continue.
```

```
Enter the coefficients of x^2, x and constant: 1 2 8
The roots are imaginary.
The roots are -1.00+ i(2.65) and -1.00- i(2.65)

Process returned 0 (0x0)   execution time : 2.409 s
Press any key to continue.
```

2. Arithmetic using switch

```
Enter the two numbers: 2 4
Enter the operator(+,-,*,/,%): +
The sum is: 6

Process returned 0 (0x0)   execution time : 12.590 s
Press any key to continue.
```

```
Enter the two numbers: 2 4
Enter the operator(+,-,*,/,%): -
The difference is: -2

Process returned 0 (0x0)   execution time : 4.220 s
Press any key to continue.
```

```
Enter the two numbers: 2 4
Enter the operator(+,-,*,/,%): *
The product is: 8

Process returned 0 (0x0)   execution time : 3.667 s
Press any key to continue.
```

```
Enter the two numbers: 2 4
Enter the operator(+,-,*,/,%): /
The Quotient is: 0

Process returned 0 (0x0)   execution time : 4.335 s
Press any key to continue.
```

3. Fibonacci series

```
Enter a number: 7
First 7 fibonacci series i:
 0
 1
 1
 2
 3
 5
 8

Process returned 0 (0x0)   execution time : 1.750 s
Press any key to continue.
```

4. Palindrome

```
Enter a number to be reversed: 18
Reverse of 18 is 81.
18 is not a palindrome.

Process returned 0 (0x0)   execution time : 2.845 s
Press any key to continue.
```

```
Enter a number to be reversed: 55
Reverse of 55 is 55.
55 is a palindrome.

Process returned 0 (0x0)   execution time : 3.525 s
Press any key to continue.
```

5. Prime number

```
Enter a number: 57
57 is not a prime number.

Process returned 0 (0x0)   execution time : 5.305 s
Press any key to continue.
```

```
Enter a number: 18
18 is not a prime number.

Process returned 0 (0x0)   execution time : 3.885 s
Press any key to continue.
```

6.1. Bubble sort

```
Enter the size of the array: 5
Enter the elements of the array: -1 -2 0 2 1

Sorted elements are: -2 -1 0 1 2

Process returned 0 (0x0)   execution time : 7.646 s
Press any key to continue.
```

6.2 Selection sort

```
Enter the size of the array: 5
Enter the elements of the array: -1 -2 0 2 1

Sorted elements are: -2 -1 0 1 2

Process returned 0 (0x0)   execution time : 12.119 s
Press any key to continue.
```

7.1 Linear search

```
Enter the size of the array: 5
Enter the elememts of the array: 5 4 3 2 1
Enter the element you want to search: 1
1 is found at index 5.

Process returned 0 (0x0)   execution time : 15.025 s
Press any key to continue.
```

7.2 Binary search

```
Enter the size of the array: 5
Enter the elements of the array: 5 4 3 2 1
Enter the element you want to search: 1

Sorted elements are: 1 2 3 4 5
1 found at 1.

Process returned 0 (0x0)   execution time : 6.080 s
Press any key to continue.
```

8. Matrix multiplication (2D array)

```
Enter the number of rows and columns of Matrix A: 1 2
Enter the number of rows and columns of Matrix B: 1 2

Matrix multiplication cannot be performed due to incompatible dimensions.

Process returned 0 (0x0)   execution time : 2.199 s
Press any key to continue.
```

```
Enter the number of rows and columns of Matrix A: 2 2
Enter the number of rows and columns of Matrix B: 2 2
Enter the elements of Matrix A: 1 0 0 1
Enter the elements of Matrix A: 1 0 0 1

Matrix After multiplication:
1 0
0 1

Process returned 0 (0x0)   execution time : 7.265 s
Press any key to continue.
```