1. Complete the Stash in chapter 4 according to the following demands:
    1.1 Define a member function, Remove, to delete an element at specified position;
    1.2 Define a member function, Contract, to release the memory when necessary.

2. Here is a callback function -- namely called function by function pointer.
    2.1 Define function, DrawTriangle, to show an isosceles triangle with stars.
    2.2 Define function, DrawSquare, to show a square with pluses.
    2.3 Callback can call functions you define as following:

```
int main()
{
        int row;      // numbers of shape's row

        cin >> row;
        Draw(DrawTriangle, row);

        cout << endl << endl;
        Draw(DrawSquare, row);

        return 0;
}
```

    The output is here:

```
     *
    ***
   *****
  *******
 *********


+ + + + +
+       +
+       +
+       +
+ + + + +
```

3. Create a class CCircle, and finish the following demands:
    3.1 Define a member function, Distance, to get the distance between two points.
    3.2 Define a member function, Relationship, to judge the relationship between two circles, such as seperated, circumscribed, overlapped, inscribed, contained, coincide or other;
    Note: (1) You can define appropriate member variables and parameters according to your member functions.
            (2) The CCircle you defined is used as following codes.

```
int main()
{
    CCircle c1(3);        // 3 is radius
    CCircle c2(2, 4, 3); // 2 is radius, 4 is x-coordinate,3 is
y-coordiante.
```

```
        cout << "The relationship is " << c1.Relationship(c2) << endl;

        return 0;
    }

    Output is:
        The relationship is circumscribe.
```

4. Creat a class CDate, and finish the following functions as below:
   4.1 Define a member function, Span, to get the number of days of two dates,
such as :

```
        CDate date1(2025, 2, 24),    date2(2025, 3, 12);
        int  spanDays = date1.Span(date2);
```

   4.2 You may define other members as needed and appropriate parameters
according to your member functions.

[optional 1]
Create a program that opens a text file, Chapter5InJourneyToWest.txt .
   1.1 Define a function to count the words in the file;
   1.2 Question: Who are the very important person in {大王,玉帝,七仙女,大圣}?
 Please give two names and tell WHY.

[optional 2]
Define an array of int. Take the starting address of that array and use
static_cast to convert it into void*.
Write a function that takes a void*, a number(indicating a number of bytes), and
a value(indicating the value to which each byte should be set) as arguments.
The function should set each byte in the specified range to the spcified value.
Try out the function on your array of int.