

1. Create a program that opens a text file, JourneyToWest.txt .
 - 1.1 Define a function to count the words in the file;
 - 1.2 Question: Who are the very important person in { 大圣, 玉帝, 王母娘娘, 仙女, 天王}. Please give two names and tell WHY.

2. Create a class CCircle, and finish the following demand:

2.1 Define a member function, Relationship, to judge the relationship such as seperated, circumscribed, overlapped, inscribed, contained and coincide between two circles;

2.2 Define an other member function, Exit, to call the user specified function when the object is released.

Note: (1) You can define appropriate member variables and parameters according to your member functions.

(2) Consider function pointer in Exit.

(3) The CCircle you defined is used as following codes.

```
void DrawTrangle(int n);    // n is rows of trangle
void DrawSquire(int n);    // n is rows of squire

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

    c1.Exit(DrawTriangle, 4);
    c2.Exit(DrawSquire, 5);

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

    return 0;
}
```

Output is:

The relationship is circumscribe.

```

      *
    ***
  *****
 *****

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

3. Create a class CDate, and finish the following functions as below:

3.1 Define a member function, Span, to get the number of days of two dates, such as :

```
CDate date1(2024, 2, 26),    date2(2024, 3, 14);  
int  spanDays = date1.Span(date2);
```

3.2 You may define other members as needed.

Note: You can define appropriate parameters according to your member functions.

4. Complete the Stash in chapter 4 according to the following demands:

4.1 Define a member function, Remove, to delete an element at specified position;

4.2 Define a member function, Contract, to release the memory when necessary.

[optional]

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 specified value. Try out the function on your array of int.