Lab2:BombLab

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1 Problems I Met and How I Solved Them

1. At first, I knew basically nothing about GDB. But after I carfully learned TA's tutorial, I got a quite good knowledge of basic operatrions of GDB and put it into use right away.

2. In phase 1-4, the answers are quite obvious and straightforward, which often ocurr at the end of the assembly code. Hence, after I figured out the input format, I quickly found out what the defusion code is.

3. In phase 5, it took me quite a while to figure out it's actually some sort of call-by-rank game. This game must end with number 15 and be repeated 15 times. Also, it only conserves the first 4 bit of input number. Hence, I printed out the array and found out how this game carry out and finally defused the bomb.

4. In phase 6, I was puzzled by the "input control" at first since I had never encountered a nested loop in assembly code before. Then I was impeded by a come-from-nowhere address, which seemed to make no sence. But then I realized that it is indeed a link. Then all I had to do is follow the link and sort the link.

2 What I Have Learned

1. How to use GDB to debug a program step by step, even line by line in assembly code.

2. Read and figure out a part of assembly code effectively, such as loop, nested loop, redirected link.

3 The Answers to Bomb6

1. The moon unit will be divided into two divisions.

2. 1 2 4 7 11 16

3. 1 -1242

4. 1 11

5. 5 115

6. 2 6 3 5 4 1