

| Online Judge (OJ) User Guide

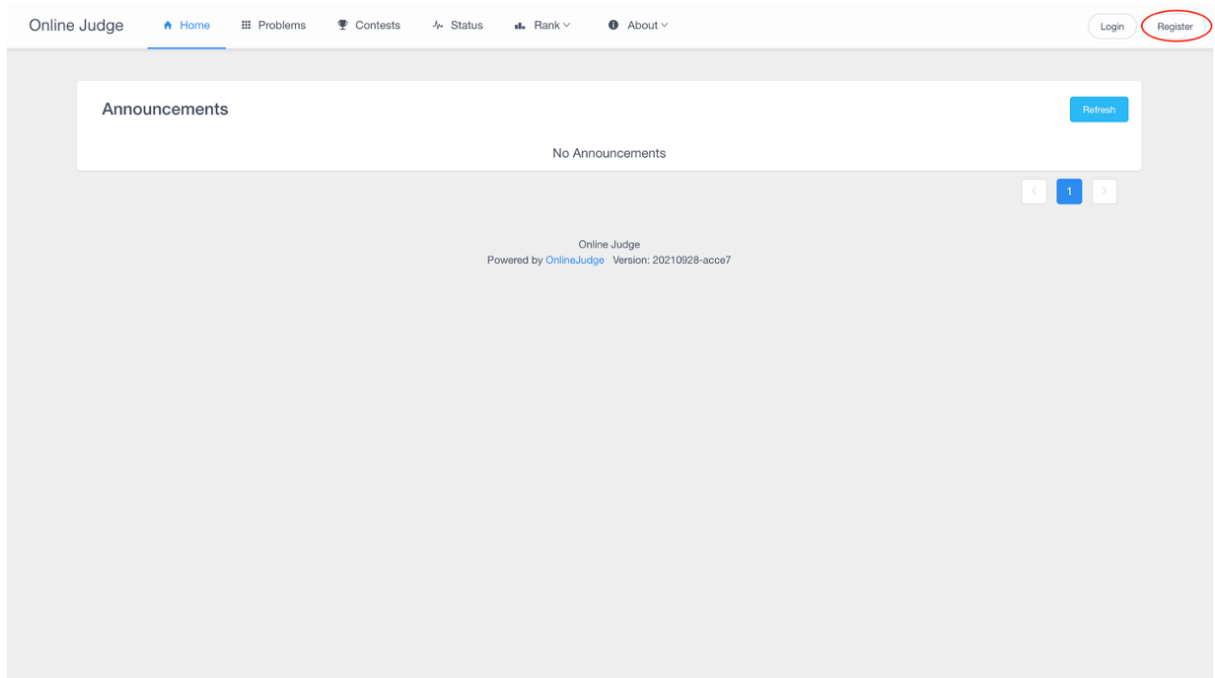
| 1. What is an Online Judge?

An **Online Judge (OJ)** is a system that automatically evaluates programming submissions. It typically provides a collection of problems, each with input and output specifications, and tests your code against hidden datasets. The OJ will return the result (e.g., Accepted, Wrong Answer, Time Limit Exceeded, Memory Limit Exceeded).

| 2. Getting Started

1. Register / Log in

- Create an account on the OJ platform using your email or student ID.



Welcome to OJ

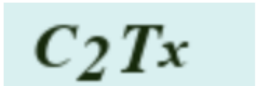
 binhong

 bli120@connect.hkust-gz.edu.cn





 C2Tx



Register

Already registered? Login now!

2. Browse Problems

- Navigate to the *Contest* page.

Online Judge

Home

Problems

Contests

Status

Rank

About

binhong

All Contests

Rule

Status

Keyword

 Test_Lab

2025-9-3 00:00

a day

ACM

Underway

 Lab00

2025-9-3 00:00

5 days

ACM

Underway

- Choose one of the problems from problem lists

Problems List				Overview			
				Announcements			
				Problems			
				Submissions			
				Rankings			
#	Title	Total	AC Rate				
1	Happy	0	0%				

3. Read a Problem Statement

- Each problem contains:
 - Description**: the task you need to solve.
 - Input format**: how data is given.
 - Output format**: what your program must print.
 - Constraints**: limits on input size, time, and memory.
 - Sample Input/Output**: example to test your understanding.

The screenshot shows the Online Judge interface for a problem titled "Happy". The navigation bar at the top includes links for Home, Problems, Contests, Status, Rank, and About. The user's name "binhong" is in the top right corner. The problem page is divided into two main sections: the problem description and a sidebar with navigation links and information.

Problem Description:

Description
Determining Whether a Number is "Happy". A happy number is a number defined by the following process: Starting with any positive integer, replace the number by the sum of the squares of its digits, and repeat the process until the number equals 1 (where it will stay), or it loops endlessly in a cycle which does not include 1. Those numbers for which this process ends in 1 are happy numbers.

Input
A positive integer n ($1 \leq n \leq 10^6$) which represents the number to check for being happy.

Output
Return True if the number is a happy number, otherwise return False.

Sample Input 1 19
Sample Output 1 True

Sample Input 2 2
Sample Output 2 False

Sidebar:

- Problems
- Announcements
- Submissions
- Rankings
- View Contest
- Information
 - ID: 1
 - Time Limit: 1000MS
 - Memory Limit: 256MB
 - IO Mode: Standard IO
 - Created By: yufei_wen
 - Level: Low
 - Tags: [Show](#)

3. Writing and Testing Your Code

1. Choose a Programming Language

- The OJ support C, C++, Java, Python, etc.
- Make sure your solution follows the input/output requirements exactly (no extra text).

The screenshot shows the Online Judge code editor interface. At the top, there is a "Language:" dropdown menu with "C" selected. To the right of the dropdown are icons for a compiler and a submit button. The "Theme:" dropdown menu is set to "Solarized Light". The main area is a large text editor with a line number "1" on the left. A dropdown menu is open, showing the following options: C, C++, Golang, Java, JavaScript, and Python3. At the bottom right, there is an orange "Submit" button.

2. Test Locally

- Use the sample input provided.
- Run your program and check that the output matches the sample output exactly.

- [Hint](#)

Sample1:

19 -> $1^2 + 9^2 = 82$

82 -> $8^2 + 2^2 = 68$

68 -> $6^2 + 8^2 = 100$

100 -> $1^2 + 0^2 + 0^2 = 1$

Sample2:

2 -> $2^2 = 4$

4 -> $4^2 = 16$

16 -> $1^2 + 6^2 = 37$

37 -> $3^2 + 7^2 = 58$

58 -> $5^2 + 8^2 = 89$

89 -> $8^2 + 9^2 = 145$

145 -> $1^2 + 4^2 + 5^2 = 42$

42 -> $4^2 + 2^2 = 20$

20 -> $2^2 + 0^2 = 4$

| 4. Submitting Your Code

1. Select your language from the drop-down menu.
2. Paste or upload your source code.
3. Click **Submit** and wait for the result.



| 5. Understanding the Verdicts

- **Accepted (AC):** Your program passed all test cases.
- **Wrong Answer (WA):** Output does not match the expected result.
- **Time Limit Exceeded (TLE):** Your code is too slow. Try optimizing.
- **Memory Limit Exceeded (MLE):** Your program uses too much memory.

- **Runtime Error (RE):** Your program crashed (e.g., division by zero, array out of bounds).
- **Compilation Error (CE):** The code did not compile successfully.
- You can view the detailed error message by clicking the **Compile Error** button

Language: C 🏠 🔍

Theme: Solarized Light

```
1 def is_happy(n: int) -> bool:
2     seen = set()
3     while n != 1 and n not in seen:
4         seen.add(n)
5         n = sum(int(digit) ** 2 for digit in str(n))
6     return n == 1
7
8 if __name__ == "__main__":
9     n = int(input().strip())
10    print("True" if is_happy(n) else "False")
```

Status ● Compile Error Submit

Compile Error

```
/judger/run/24747de9814749f48981bb0a3f22e220/main.c:1:1: error: unknown type name 'def'
1 | def is_happy(n: int) -> bool:
  | ^~
/judger/run/24747de9814749f48981bb0a3f22e220/main.c:1:15: error: expected ')' before ':' token
1 | def is_happy(n: int) -> bool:
  |               ^
  |               )
```

```
def is_happy(n: int) -> bool:
    seen = set()
    while n != 1 and n not in seen:
        seen.add(n)
        n = sum(int(digit) ** 2 for digit in str(n))
    return n == 1

if __name__ == "__main__":
    n = int(input().strip())
    print("True" if is_happy(n) else "False")
```

Share