**PROBLEMS**

1. **143 VIRUS.**
2. **Doom’s day.**
3. **Coach in the Crease.**

**143 VIRUS:**

Question:

Tarun and Sunny developed two machines, which would produce binary numbers. These two didn’t include their best friend Venkat in either of teams. So, Venkat decided to change the way the machine gives the output. He introduced a Virus called **143 VIRUS,** which resulted two machines to output in this sequence.

Machine 1: 4,5,2,5, …

Machine 2: 1,1,9,6, …

Those two somehow came to know that this was done by their friend Venkat, who is good at hacking. They went to Venkat and fumed on him to get back their machines to original state. But Venkat said **“Solve my question and I will reveal you the hack “.**

Question: According to my virus algorithm give me the nth term of two machine’s output.

They both were shocked and asked some time to answer it. Write a program to help Sunny and Tarun.

**Venkat’s Note: My VIRUS is the ANSWER itself.**

**Input Format:** a single integer n

**Constraints:** 5<=n<=49.

**Output Format:** two space separated integers

**Sample Test Cases:**

**Input 1:**

14

**Output:**

2 3

**Input 1:**

43

**Output:**

3 0

**DOOMS DAY:**

Sunny is a psychic and always a pessimistic person. He wanted to destroy and conquer the world. So, he began to worship Tarun, the god of destruction. After 666 days the God of destruction was impressed by his dedication but wants to test his worthiness. So Tarun, the God of destruction asked sunny to solve a puzzle. He promised sunny that if the answer was right, he would give the power to destroy the world. The name of the puzzle is “Dooms day.”

**Doom’s Day:**

Tarun will give an 8-digit number.

The date format is given below:

**Year**: Smallest 4-digit number formed from the 8-digit number

**Month**: Smallest Month formed from the remaining 4-digit number. (It can have a single digit)

**Day**: Largest Date formed from the remaining digits. (It can have a single digit)

Sunny must find on what day the given date falls.

So, help Sunny to solve the puzzle

**Input format:**

8-digit number in a single line

**Output format:**

Name of the day

**Sample Testcase:**

**Input 1:**

49122207

**Output:**

Wednesday

**Explanation:**

**Year:** 1022

**Month:** 9

**Day:** 24(smallest 2 digit possible)

**Input 2:**

10091321

**Output:**

Tuesday

**Explanation:**

**Year:** 1001

**Month:** 12

**Day:** 2

**COACH IN THE CREASE:**

On a match day, the Indian squad is ready to take over against Pakistan in one of their favorite grounds, Eden Gardens. All the squad members started from hotel to the ground, except their coach Venkat who should restrict himself to the room due to illness. He is a very dedicated coach and feels anxious to know about the scorecard. So, he asks one of his mates to send the scorecard. He sends ball wise scores to the coach, but coach is willing to know who the batsman on strike is. He decides to analyze the scorecard and find the batsmen on the striker side. So, please help our coach to find the answer.

**Note:** Know the rules of cricket. If a batsman is out the next batsmen takes his position. Batsmen will be interchanged after every over. If it is the last wicket print 0 else print the batsman position. Batsman 1 and Batsman 2 are on the striker and non-striker side.

**No Ball – Nb**

**Wide – Wd**

**Wicket - W**

**Input Format:**

Comma separated ball by ball score.

**Output Format:**

Current batsmen position in the striker crease on the next ball.

**Sample Testcase:**

**Input 1:**

1,2,3,W,2,4,4,6,W,W,1,1

**Output:**

Hello,

We welcome to the event of the semester “CODE3000”. It is the coding event launched by pragati to know the best of the best coders of pragati. It is a 4 hour challenge which will be held between 8 pm to 12pm.

It is best to login to the link below, 20 min before. Make sure you have active internet connection before starting the test.

The hackerrank link is: [www.hackerrank.com/code3000](https://www.hackerrank.com/code3000)

Post this link in your class whatsapp group if already posted neglect it.

Think Hard, Code Smart.

Thank You,