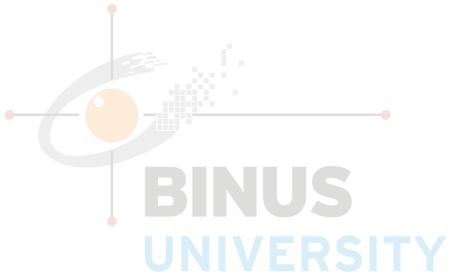
COMP6047 – Algorithm and Programming 

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Game Tournaments

Bibi with her team Aqueous compete in the biggest tournament in history. Bibi will N

face*N* team in group stage. Bibi wants to know how many possible outcomes that team Aqueous win at least once.

DO

Format Input

Given 1 line consists of 1 integer*N* - number of teams that Aqueous will face.

Format Output

Output 1 number that describe all possible outcomes that team Aqueous win at least once.

Constraints

• 1 *≤ N ≤* 50

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Sample Input 1 (standard input)

| 1 |
| --- |

Sample Output 1 (standard output)

~~O~~

N

| 1 |
| --- |

Sample Input 2 (standard input)

DO

| 2 |
| --- |

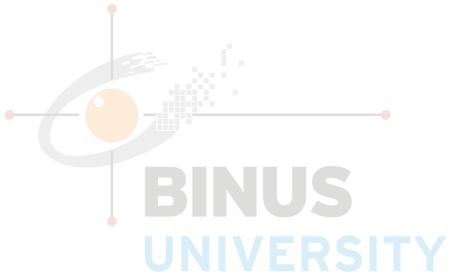
Sample Output 2 (standard output)

| 3 |
| --- |

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Sample Input 3 (standard input)

~~O~~

| 3 |
| --- |

Sample Output 3 (standard output)

N

| 7 |
| --- |

DO

Explanation

Assume that W is symbol for win and L for lose. Then, for Sample Test Case 2, there are 7 possible outcomes :

• LLL

• LLW

• LWL

• LWW

• WLL

• WLW

• WWL

• WWW

Note

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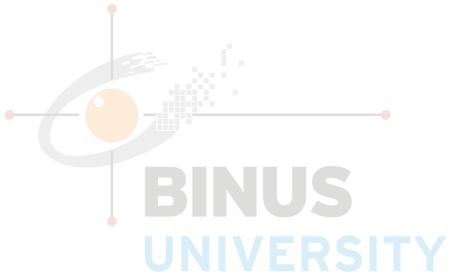
You can use bitwise operator to solve this problem.

DO

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Game Tournaments

Bibi bersama dengan tim Aqueous mengikuti turnamen terbesar dalam sejarah. Bibi N

dan timnya akan berhadapan dengan*N* tim di *group stage*. Bibi ingin tahu ada berapa banyak kemungkinan tim Aqueous menang setidaknya satu kali dalam *group stage*.

DO

Format Input

Diberikan 1 baris yang terdiri dari 1 buah integer*N* yaitu jumlah tim musuh yang akan dihadapi oleh tim Aqueous.

Format Output

Output yang dikeluarkan hanya berupa 1 buah angka yang menyatakan berapa banyak kemungkinan tim Aqueous menang setidaknya satu kali dalam *group stage*.

Constraints

• 1 *≤ N ≤* 50

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E~~DI~~S~~T~~R~~I~~B~~U~~T

Sample Input 1 (standard input)

~~O~~

| 1 |
| --- |

N

Sample Output 1 (standard output)

| 1 |
| --- |

DO

Sample Input 2 (standard input)

| 2 |
| --- |

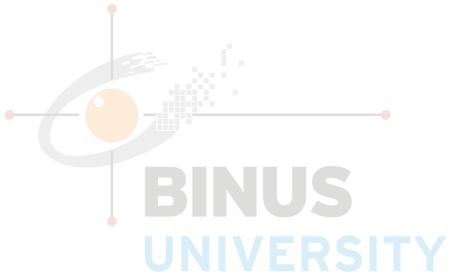
Sample Output 2 (standard output)

| 3 |
| --- |

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REDISTR~~I~~B~~UT~~ 

Sample Input 3 (standard input)

~~O~~

| 3 |
| --- |

Sample Output 3 (standard output)

N

| 7 |
| --- |

DO

Explanation

Asumsikan W adalah simbol menang dan L untuk kalah. Maka, untuk 3 musuh dalam group stage, seperti pada *Sample Test Case 2*, terdapat 7 buah kemungkinan yang mungkin terjadi :

• LLL

• LLW

• LWL

• LWW

T

• WLL

• WLW

• WWL

• WWW

Note

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N

Anda dapat menggunakan *bitwise operator* untuk menyelesaikan soal ini. DO

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