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CodeVita 2016 Round 2 Question: The Vita Sum

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Vikash Verma (<https://plus.google.com/107740160110988208853>) [8/20/2016](#)
(2016-08-20T06:58:00-07:00)

(<http://www.programminggeek.in/2016/08/codevita-2016-round-2-question-vita-sum.html>)

Problem : The Vita Sum



(<https://3.bp.blogspot.com/->



Statement

Tom the cat is brushing up his Math skills. He has a bag containing N balls of different colors. Now Tom can randomly pick any even number of balls from the bag. Tom wants to find out the sum of all such combinations of balls that he can pull out from the bag. He can pull out at max K balls in one pick.

Input Format:

First line contains two space separated numbers N and K

Output Format:

The output is the sum of all the combinations of balls he can pull out modulo 10^9+7 i.e. (1000000007)

Constraints:

1. $0 \leq N, k \leq 10^{14}$
2. $N \geq k$

Sample Input and Output

| S N o . | Input | Output | Explanation |
|------------------|-------|--------|-------------|
| | | | |



| | | | |
|---|-----|----|--|
| | | | |
| 1 | 4 4 | 8 | We need ${}^4C_0 + {}^4C_2 + {}^4C_4 =$ $1+6+1=8$ |
| 2 | 8 3 | 29 | We need ${}^8C_0 + {}^8C_2 =$ $1+28=29$ |

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Labels: TCS CODEVITA

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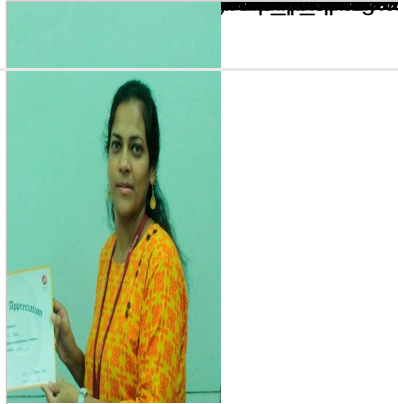
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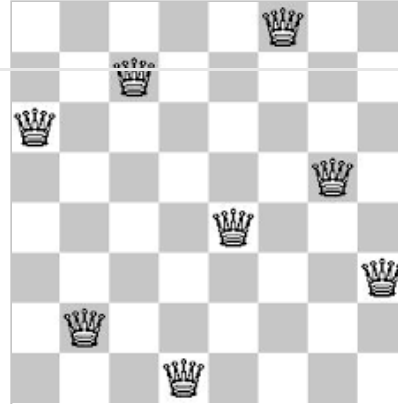
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Problem : The Vita Sum Statement Tom the cat is brushing up his Math skills. He has a bag containing
Now Tom can randomly pick any even number of balls from the bag. Tom wants to find out the sum o

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Solution??

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its just the case to find the probability of the combinational picks....

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I Need a full program

**Omkar Langhe** 1 month ago **+1**

ok.

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TCS CodeVita Previous years' question

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Watch this Space for TCS CodeVita Previous years' question. I will be publishing most of the TCS ...

Online TCS Verbal Ability Test

(<http://www.programminggeek.in/2014/09/tcs-verbal-test-simulator.html>)

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TCS Placement Pattern for 2015 Batch

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(/) Well, placement season has started and the tech giant TCS is all set to recruit students from 2015 batch. TCS changes its recruitment proc...



TCS Verbal Ability Test Sample Email : Set7
(<http://www.programminggeek.in/2014/10/tcs-verbal-ability-test-sample-email-set7.html>)

Write an e-mail to client to invite him to the party using the following phrases, with a minimum of 50 words and a maximum of 100 words. ...

How to Write a Convincing E-mail
(<http://www.programminggeek.in/2013/12/how-to-write-convincing-e-mail.html>)
Follow this simple, six-step system to ensure your e-mails get the job done. E-mails are the most common document in the business w...



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TCS CodeVita 2016 Round1 Question: Min Product Array
(<http://www.programminggeek.in/2016/07/tcs-codevita-2016-round1-question-minimum-sum-the-task-is-to-find-minimum-sum-of.html>)

The task is to find the minimum sum of Products of two arrays of the same size, given that k modifications are allowed on the first a...



(<http://www.programminggeek.in/2015/09/tcs-placement-preparation-for-2016-batch.html>)

TCS Placement Preparation for 2016 batch
(<http://www.programminggeek.in/2015/09/tcs-placement-preparation-for-2016-batch.html>)

The Placement for 2016 batch has gained pace and many people have got the offer.



I thought it was the time to jot down some
(/)key starte...



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Game of Marbles
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TCS CodeVita 2016 Round 1 result
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