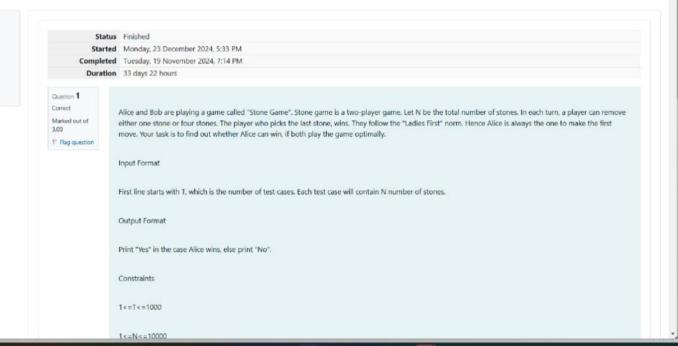
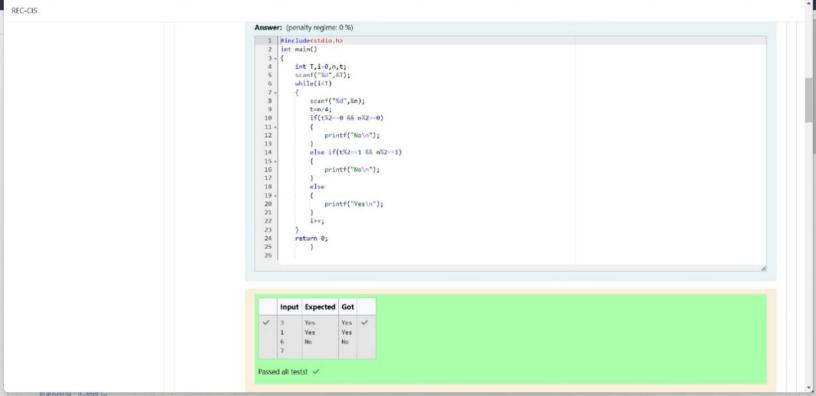
rec-cis

GE23131-Programming Using C-2024



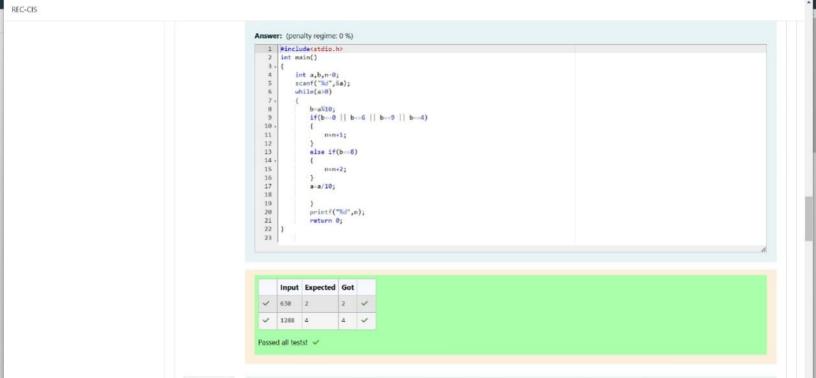


REC-CIS .	
	Print "Yes" in the case Alice wins, else print "No".
	Constraints
	1<=T<=1000
	1<=N<=10000
	Sample Input and Output
	Input
	3
	1 6
	₹
	Output
	Yes
	Yes No



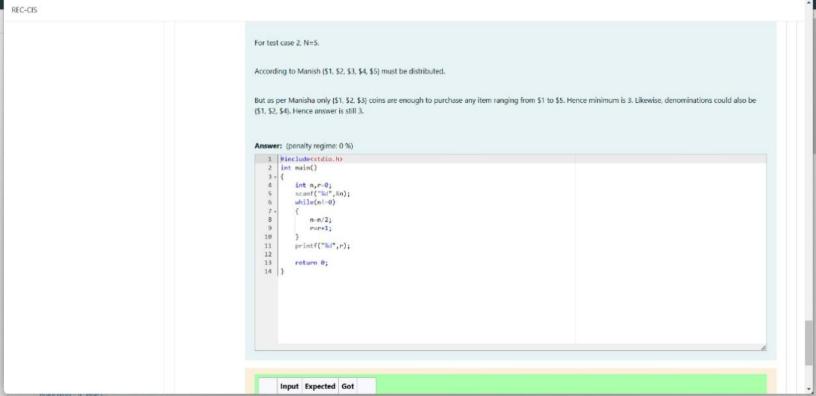
REC-CIS	
Question 2 Correct Marked out of 5.00	You are designing a poster which prints out numbers with a unique style applied to each of them. The styling is based on the number of closed paths or holes present in a given number.
₹ Flag question	The number of holes that each of the digits from 0 to 9 have are equal to the number of closed paths in the digit. Their values are:
	1, 2, 3, 5, and 7 = 0 holes.
	0, 4, 6, and 9 = 1 hole.
	8 = 2 holes.
	Given a number, you must determine the sum of the number of holes for all of its digits. For example, the number 819 has 3 holes.
	Complete the program, it must must return an integer denoting the total number of holes in num.
	Constraints
	1 ≤ num ≤ 109
	Input Format For Custom Testing
	There is one line of text containing a single integer num, the value to process.
	Sample Input
	630





REC-CIS	
Coversion 3 Correct Marked out of 7,00 Y' Flag question	The problem solvers have found a new Island for coding and named it as Philaland. These smart people were given a task to make a purchase of items at the Island easier by distributing various coins with different values. Manish has come up with a solution that if we make coins category starting from \$1 till the maximum price of the item present on Island, then we can purchase any item easily. He added the following example to prove his point. Let's suppose the maximum price of an item is 5\$ then we can make coins of [\$1, \$2, \$3, \$4, \$5] to purchase any item ranging from \$1 till \$5. Now Manisha, being a keen observer suggested that we could actually minimize the number of coins required and gave following distribution [\$1, \$2, \$3]. According to him any item can be purchased one time ranging from \$1 to \$5. Everyone was impressed with both of them. Your task is to help Manisha come up with a minimum number of denominations for any arbitrary max price in Philaland.
	Input Format Contains an integer N denoting the maximum price of the item present on Philaland.
	Output Format
	Print a single line denoting the minimum number of denominations of coins required.
	Constraints
	1<=T<=100 1<=N<=5000
	Refer the sample output for formatting
	Sample Input 1:

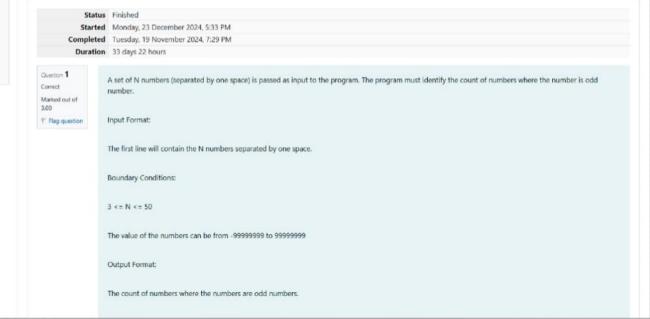
REC-CIS	
	Sample Output 1:
	4
	Sample Input 2:
	5
	Sample Output 2:
	3
	Explanation:
	For test case 1, N=10.
	According to Manish (\$1, \$2, \$3, \$10) must be distributed.
	But as per Manisha only (\$1, \$2, \$3, \$4) coins are enough to purchase any item ranging from \$1 to \$10. Hence minimum is 4. Likewise denominations could also be (\$1, \$2, \$3, \$5). Hence answer is still 4.
	For test case 2, N=5.
	According to Manish (\$1, \$2, \$3, \$4, \$5) must be distributed.

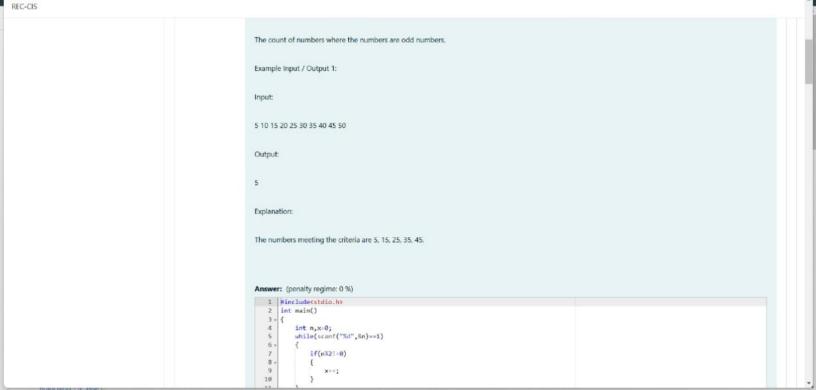


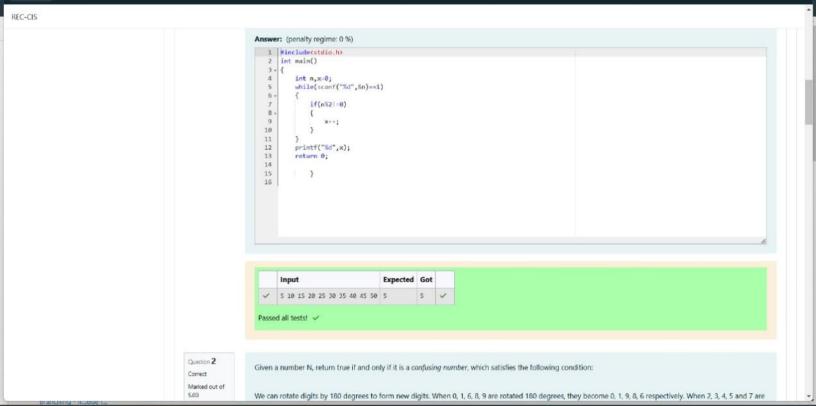
REC-CIS Answer: (penalty regime: 0 %) 1 |Winclude(stdio.h> int main() int n,r=0; scanf("%d", &n); while(n!-0) n=n/2; r=r+1; 10 11 12 printf("%d",r); 13 14 } return 0; Input Expected Got ~ ~ 20 V 4 ✓ 1800 18 10 🗸 Passed all tests! <

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Question 3 Correct

> 7.00 * Flag question

Marked out of

for each, until all items have a value associated with them. An item's value is the same as the number of macronutrients it has. For example, food item with value 1 has 1 macronutrient, food item with value 2 has 2 macronutrients, and incrementing in this fashion, The nutritionist has to recommend the best combination to patients, i.e. maximum total of macronutrients. However, the nutritionist must avoid prescribing a

Given 4 food items (hence value: 1,2,3 and 4), and the unhealthy sum being 6 macronutrients, on choosing items 1, 2, 3 -> the sum is 6, which matches the

Here's an illustration:

2+3+4=9 1+3+4=8 1+2+4=7

Since 2 + 2 + 4 - 0 allows for maximum number of macronutrients. 9 is the right answer

'unhealthy' sum. Hence, one of the three needs to be skipped. Thus, the best combination is from among:

particular sum of macronutrients (an 'unhealthy' number), and this sum is known. The nutritionist chooses food items in the increasing order of their value. Compute the highest total of macronutrients that can be prescribed to a patient, without the sum matching the given 'unhealthy' number.

A nutritionist is labeling all the best power foods in the market. Every food item arranged in a single line, will have a value beginning from 1 and increasing by 1

REC-CIS	
	Complete the code in the editor below. It must return an integer that represents the maximum total of macronutrients, modulo 1000000007 (109 + 7).
	It has the following:
	n: an integer that denotes the number of food items
	k: an integer that denotes the unhealthy number
	Constraints
	- 1≤n≤2×10 ⁹
	$1 \le k \le 4 \times 10^{15}$
	Input Format For Custom Testing
	The first line contains an integer, n, that denotes the number of food items.
	The second line contains an integer, k, that denotes the unhealthy number.
	Sample Input 0
	2
	2
	Sample Output 0
	3

	Explanation 0
	The following sequence of $n = 2$ food items:
	Item 1 has 1 macronutrients.
	2. $1 + 2 = 3$; observe that this is the max total, and having avoided having exactly $k = 2$ macronutrients.
	Sample Input 1
	2
	1
	Sample Output 1
	2
	Explanation 1
	 Cannot use item 1 because k = 1 and sum = k has to be avoided at any time.
	2. Hence, max total is achieved by sum = 0 + 2 = 2.
	Sample Case 2
	Sample Input For Custom Testing
	A
	Sample Input 2
branching milese in	

REC-CIS Sample Output 2 **Explanation 2** 2 + 3 = 5, is the best case for maximum nutrients. Answer: (penalty regime: 0 %) 1 #include(stdio.h) int main() long long int n,t,i,nut=0; scanf("%lld %lld",&n,&t); for(i=1;i<=n;i++) nut=nut+i; if(nut-t) 10 -11 nut=nut-1; 12 13 14 printf("%11d", nut%1000000007); 15 return 0; 16 17

