Programming Using C

Week-5 Practice Session Coding

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Question 1
                   Write a program that prints a simple chessboard.
Correct
Marked out of
3.00
                   Input format:
₹ Flag question
                   The first line contains the number of inputs T.
                   The lines after that contain a different values for size of the chessboard
                   Output format:
                   Print a chessboard of dimensions size * size. Print a Print W for white spaces and B for black spaces.
                   Input:
                   2
                   3
                   5
                   Output:
                   WBW
                   BWB
                   WBW
                   WBWBW
                   BWBWB
                   WBWBW
                   BWBWB
                   WBWBW
```

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Question 2
                   Let's print a chessboard!
Correct
Marked out of 5.00
                    Write a program that takes input:
₹ Flag question
                    The first line contains T, the number of test cases
                    Each test case contains an integer N and also the starting character of the chessboard
                    Output Format
                    Print the chessboard as per the given examples
                   Sample Input / Output
                    Input:
                   2
                   2 W
                   3 B
                   Output:
                   WB
                   BW
                    BWB
                   WBW
                   BWB
```

Question 3 Decode the logic and print the Pattern that corresponds to given input. Correct Marked out of 7.00 If N= 3 Flag question then pattern will be: 10203010011012 **4050809 ****607 If N= 4, then pattern will be: 1020304017018019020 **50607014015016 ****809012013 *****10011 Constraints 2 <= N <= 100 Input Format First line contains T, the number of test cases Each test case contains a single integer N

Output

First line print Case #i where i is the test case number In the subsequent line, print the pattern Test Case 1 3 3 4 5 Output Case #1 10203010011012 **4050809 ****607 Case #2 1020304017018019020 **50607014015016 ****809012013 *****10011 Case #3 102030405026027028029030 **6070809022023024025 ****10011012019020021 *****13014017018 ******15016

| | Input | Expected | Got | |
|----------|------------|--------------------------|--------------------------|---|
| ~ | 3 | Case #1 | Case #1 | ~ |
| | 3 | 10203010011012 | 10203010011012 | |
| | 4 | **4050809 | **4050809 | |
| | 5 | ****607 | ****607 | |
| | | Case #2 | Case #2 | |
| | | 1020304017018019020 | 1020304017018019020 | |
| | | **50607014015016 | **50607014015016 | |
| | | ****809012013 | ****809012013 | |
| | | *****10011 | *****10011 | |
| | | Case #3 | Case #3 | |
| | | 102030405026027028029030 | 102030405026027028029030 | |
| | | **6070809022023024025 | **6070809022023024025 | |
| | | ****10011012019020021 | ****10011012019020021 | |
| | | *****13014017018 | ******13014017018 | |
| | | *******15016 | *******15016 | |
| | | | | |
| assec | d all test | s! 🗸 | | |

Question 1
Correct
Marked out of 3.00

Flag question

The k-digit number N is an Armstrong number if and only if the k-th power of each digit sums to N.

Given a positive integer N, return true if and only if it is an Armstrong number.

Example 1:

Input:

153

Output:

true

Explanation:

153 is a 3-digit number, and 153 = 1^3 + 5^3 + 3^3.

Example 2:

Input:

123

Output:

false

Explanation:

123 is a 3-digit number, and 123 != 1^3 + 2^3 + 3^3 = 36.

Example 3:

Input:

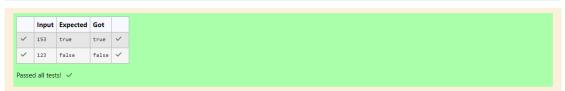
1634

Output:

true

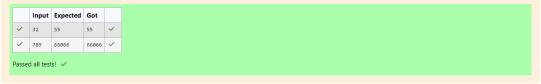
Note:

1 <= N <= 10^8



Question 2
Correct
Marked out of 5.00

Figure Flag question



Question 3 A number is considered lucky if it contains either 3 or 4 or 3 and 4 both in it. Write a program to print the nth lucky number. Example, 1st lucky number is 3, and 2nd lucky number is 4 and 3rd lucky number is 33 and 4th lucky number is 34 and so on. Note that 13, 40 etc., are not lucky as they have other numbers in it. Correct Marked out of 7.00 The program should accept a number 'n' as input and display the nth lucky number as output. ♥ Flag question Sample Input 1: 3 Sample Output 1: 33 Explanation: Here the lucky numbers are 3, 4, 33, 34., and the 3rd lucky number is 33. Sample Input 2: 34 Sample Output 2: 33344

