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| **Problem Statement:**  You have to implement the concept of **Switch** in Java. The final task is to input the case number to print a pattern either alphabet or numbers.  You are given a class having main method, printPatternNum and printPatternAlphabet. You’ve been provided with a starter code which contains sub-tasks as defined below:  **Sub task 1:** Create switch case in main method  **Sub task 2:** Provide 2 cases where case 1 if invoked it should call PrintPatternNum and case 2 should invoke printPatternAlphabet  **Sub task 3:**. PrintPatternNum should print Rhombus on screen with 1(border) and 0 inside  **Sub task 4:** PrintPatternAlphabet should print Rhombus on screen with increasing and decreasing alphabet for each row.Beginning with char ‘A’  **Note:**  1. Do not remove the predefined code else your code may not execute as expected.  2. You’ve to solve the problem using **Switch** ONLY. Solving through any alternate method other than the switch may lead to disqualification. |
| **Input Format:**  First line should provide 1 or 2 based on case selection  Second line should contain N represents number of lines to print( should be odd)  **Output Format**  Return the pattern in number or alphabet |
| **Sample Input:**  1  3  **Sample Output:**  1  101  1 |
| **Test Case 1 :**  **Input:**  1  5  **Output:**  1  101  1001  101  1  **Test Case 2:**  **Input:**  1  2  **Output:**  Error  **Test Case 3:**  **Input:**  2  3  **Output:**    A  ABA  A |