## 4. Wedding Seats

The newlyweds want to make a list of who will be sitting where at the wedding ceremony. The places are divided into different sectors. **Sectors are capital letters, beginning with A**. There are a number of lines in each sector. From the console read the number of rows in **the first sector ('A')**, with **the rows increasing by 1 for each subsequent sector.** In each row there is a certain number **of places - their numbering is represented by lowercase Latin letters.** The number of places in the **odd rows is read from the console**, and the even rows **have 2 more seats**.

### Input

Three lines are read from the console:

* **The last sector** – symbol ('**B'-'Z'**)
* **Rows count in the first sector** – integer (**1-100**)
* **Seats count on the odd rows** – integer (**1-24**)

### Output

Print each seat on a new line in the following format:  
{sector}{row}{seat}

**At the end print the total count of all the seats.**

### Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Hints** |
| B  3  2 | A1a  A1b  A2a  A2b  A2c  A2d  A3a  A3b  B1a  B1b  B2a  B2b  B2c  B2d  B3a  B3b  B4a  B4b  B4c  B4d  20 | The last sector is 'В'.  On the secnd line the rows count in the first sector **(A) - 3**.  Then the seats count in the odd rows **- 2**.  **The first symbol is the sector** **A** or **B**.  The second symbol is the row. In 'A' sector there are 3 rows. There are **2 seats at the odd row** **a and b** at the even with 2 more = 4 a, b, c, d. The seats for sector А are:  A1a - **odd** row – two seats firsts seat - а  A1b - **second seat** - b  A2a - **even row** - 4 seats, **first**- а  A2b - **second** - b  A2c - **third** - c  A2d - **fourth** - d  A3a - **odd row** – two seats first - а  A3b - **second** - b  Do the same for sector B. For each next sector we have one additional tow. So in sector B there are **4 rows, instad of 3.**  Print all the seats for B.  At the end print the total count of seats in this case - **20.** |
| C  4  2 | A1a  A1b  A2a  A2b  A2c  A2d  A3a  A3b  A4a  A4b  A4c  A4d  B1a  B1b  B2a  B2b  B2c  B2d  B3a  B3b  B4a  B4b  B4c  B4d  B5a  B5b  C1a  C1b  C2a  C2b  C2c  C2d  C3a  C3b  C4a  C4b  C4c  C4d  C5a  C5b  C6a  C6b  C6c  C6d  44 |  |