

## **Simple Chessboard**

**Write a program that prints a simple chessboard.**

**Input format:**

The first line contains the number of inputs T.

The lines after that contain a different value for size of the chessboard

**Output format:**

Print a chessboard of dimensions size \* size.

Print W for white spaces and B for black spaces.

**Sample Input:**

**2**

**3**

**5**

**Sample Output:**

**WBW**

**BWB**

**WBW**

**WBWBW**

**BWBWB**

**WBWBW**

**BWBWB**

**WBWBW**

## Program:

```
#include <stdio.h>

int main()
{
    int T, size;
    scanf("%d", &T); // number of test cases

    while (T--)
    {
        scanf("%d", &size); // size of the chessboard

        for (int i = 0; i < size; i++) // loop for rows
        {
            for (int j = 0; j < size; j++) // loop for columns
            {
                // If sum of row and column index is even → W, else → B
                if ((i + j) % 2 == 0)
                    printf("W");
                else
                    printf("B");
            }
            printf("\n"); // move to next line after each row
        }
    }
    return 0;
}
```

## **Print Our Own Chessboard**

**Let's print a chessboard!**

**Write a program that takes input:**

**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:**

**2**

**2 W**

**3 B**

**Sample Output:**

**WB**

**BW**

**BWB**

**WBW**

**BWB**

**Program:**

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int T, N;
```

```
    char start;
```

```
    scanf("%d", &T);
```

```
while (T--)

{
    scanf("%d %c", &N, &start);

    char first = start;

    char second = (start == 'W') ? 'B' : 'W';

    for (int i = 0; i < N; i++)

    {
        for (int j = 0; j < N; j++)

        {
            if ((i + j) % 2 == 0)

                printf("%c", first);

            else

                printf("%c", second);

        }

        printf("\\n");
    }

    return 0;
}
```

<b>(i,j)</b>	<b>i+j</b>	<b>(i+j)%2</b>	<b>Printed</b>
<b>0,0</b>	<b>0</b>	<b>0</b>	<b>W</b>
<b>0,1</b>	<b>1</b>	<b>1</b>	<b>B</b>
<b>0,2</b>	<b>2</b>	<b>0</b>	<b>W</b>
<b>1,0</b>	<b>1</b>	<b>1</b>	<b>B</b>
<b>1,1</b>	<b>2</b>	<b>0</b>	<b>W</b>
<b>1,2</b>	<b>3</b>	<b>1</b>	<b>B</b>
<b>2,0</b>	<b>2</b>	<b>0</b>	<b>W</b>
<b>2,1</b>	<b>3</b>	<b>1</b>	<b>B</b>
<b>2,2</b>	<b>4</b>	<b>0</b>	<b>W</b>