# GE23131-Programming Using C-2024

## Quiz navigation

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|---|---|
| **Status** | Finished |
| **Started** | Monday, 23 December 2024, 5:33 PM |
| **Completed** | Thursday, 5 December 2024, 9:16 AM |
| **Duration** | 18 days 8 hours |

Question **1**

Correct

Marked out of 3.00

⚑ Flag question

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 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

Output:

WBW

BWB

WBW

WBWBW

BWBWB

WBWBW

BWBWB

WBWBW

**Answer:** (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int T,d,i=0,i1,i2,o;
    char c;
    scanf("%d",&T);
    while(i<T)
    {
        scanf("%d",&d);
        i1=0;
        while(i1<d)
        {
            o=1;
            i2=0;
            if(i1%2==0)
            {
                o=0;
            }
            while(i2<d)
            {
```

```
24                    c='W';
25                }
26                printf("%c",c);
27                i2++;
28            }
29            i1+=1;
30            printf("\n");
31        }
32        i=i+1;
33    }
34 }
35
36
37
38
39
```

| | Input | Expected | Got | |
|---|---|---|---|---|
| ✔ | 2 | WBW | WBW | ✔ |
| | 3 | BWB | BWB | |
| | 5 | WBW | WBW | |
| | | WBWBW | WBWBW | |
| | | BWBWB | BWBWB | |
| | | WBWBW | WBWBW | |
| | | BWBWB | BWBWB | |
| | | WBWBW | WBWBW | |

Passed all tests! ✔

Question **2**
Correct

Let's print a chessboard!

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

```c
int main()
{
    int T,d,i,i1,i2,o,z;
    char c,s;
    scanf("%d",&T);
    for(i=0;i<T;i++)
    {
        scanf("%d %c",&d,&s);
        for(i1=0;i1<d;i1++)
        {
            z=(s=='W') ? 0:1;
            o=(i1%2==z) ? 0:1;
            for(i2=0;i2<d;i2++)
            {
                c=(i2%2==o) ? 'W' : 'B';
                printf("%c",c);
            }
            printf("\n");
        }
    }
    return 0;
}
```

| | Input | Expected | Got | |
|---|---|---|---|---|
| ✓ | 2<br>2 W<br>3 B | WB<br>BW<br>BWB<br>WBW<br>BWB | WB<br>BW<br>BWB<br>WBW<br>BWB | ✓ |

Passed all tests! ✓

Question **3**

7.00

If N= 3

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

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

10203040502602702802 9030

**6070809022023024025

********15016

**Answer:**  (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int n,v,p3,c,in,i,i1,i2,t,ti;
    scanf("%d",&t);
    for(ti=0;ti<t;ti++){
        v=0;
        scanf("%d",&n);
        printf("Case #%d\n",ti+1);
        for(i=0;i<n;i++){
            c=0;
            if(i>0){
                for(i1=0;i1<i;i1++) printf("**");

            }
            for(i1=i;i1<n;i1++){
                if(i>0) c++;
                printf("%d0",++v);

            }
            if(i==0){
                p3=v+(v*(v-1))+1;
                in=p3;
            }
            in=in-c;
            p3=in;
            for(i2=i;i2<n;i2++){
                printf("%d",p3++);
                if(i2!=n-1) printf("0");
            }printf("\n");
        }
    }
}
```

| | Input | Expected | Got | |
|---|---|---|---|---|
| ✓ | 3<br>3<br>4<br>5 | Case #1<br>10203010011012<br>**4050809<br>****607<br>Case #2<br>1020304017018019020<br>**50607014015016<br>****809012013<br>******10011<br>Case #3<br>10203040502602702 8029030<br>**60708090220230 24025<br>****100110120190 20021<br>******13014017018<br>********15016 | Case #1<br>10203010011012<br>**4050809<br>****607<br>Case #2<br>1020304017018019020<br>**50607014015016<br>****809012013<br>******10011<br>Case #3<br>10203040502602702 8029030<br>**60708090220230 24025<br>****100110120190 20021<br>******13014017018<br>********15016 | ✓ |

Passed all tests! ✓

**Finish review**