

# GE23131-Programming Using C-2024

Quiz navigation

1

2

3

Show one page at a time

Finish review

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Friday, 22 November 2024, 9:19 PM
Duration	30 days 20 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 %)

```
1  #include<stdio.h>
2  int main(){
3      int t;
4      scanf("%d",&t);
5      for ( int k = 0 ; k < t ; k++ ) {
6          int size ;
7          scanf("%d",&size);
8          for ( int i = 0 ; i < size ; i++ ) {
9              for ( int j = 0 ; j < size ; j++ ) {
10                 if ((i+j)%2 == 0 ) {
11                     printf("W");
12                 }else {
13                     printf("B");
14                 }
15             }
16             printf("\n");
17         }
18     }
19     return 0;
20 }
```


	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

Marked out of 5.00

 [Flag question](#)

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 / Output

2

2 W

3 B

Output:

WB

BW

BWB

WBW

BWB

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

```
1 #include<stdio.h>
2 int main() {
3     int t;
4     scanf("%d",&t);
5     int size;
6     char ch;
7     for ( int k = 0 ; k < t ; k++ ) {
8         scanf("%d %c",&size, &ch);
9         char first = ch ;
10        char second = ( ch == 'W' ) ? 'B': 'W';
11        for ( int i = 0 ; i < size ; i++ ) {
12            for ( int j = 0 ; j < size ; j++ ) {
13                if ( (i+j)%2 == 0 ) {
14                    printf("%c", first);
15                }else {
16                    printf("%c", second);
17                }
```

```
21 | }  
22 |     return 0 ;  
23 | }
```


	Input	Expected	Got	
✓	2	WB	WB	✓
	2 W	BW	BW	
	3 B	BWB	BWB	
		WBW	WBW	
		BWB	BWB	

Passed all tests! ✓

Question **3**

Correct

Marked out of 7.00

 [Flag question](#)

Decode the logic and print the Pattern that corresponds to given input.

If N= 3

then pattern will be :

10203010011012

\*\*4050809

\*\*\*\*607

If N= 4, then pattern will be:

\*\*50607014015016

\*\*\*\*809012013

\*\*\*\*\*10011

Constraints

$$2 \leq N \leq 100$$

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

Case #1

10203010011012

\*\*4050809

\*\*\*\*607

Case #2

1020304017018019020

\*\*50607014015016

\*\*\*\*809012013

\*\*\*\*\*10011

Case #3

102030405026027028029030

\*\*6070809022023024025

\*\*\*\*10011012019020021

\*\*\*\*\*13014017018

\*\*\*\*\*15016

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

```

1  #include<stdio.h>
2  int main() {
3      int t, n, x, y,i, z = 1, ans, c ;
4      scanf( "%d",&t );
5      while ( z <= t ) {
6          scanf("%d",&n );
7          printf("Case #%d\n", z);
8          y = 1;
9          i = 1;
10         c = 0;
11         while ( i <= n ) {

```

```
14      ans = ans - c;
15      while ( x <= 2*n ) {
16          if (x <= n){
17              if( x<y )
18                  printf("**");
19          else if (x <= n){
20              printf("%d", i*10);
21              i++;
22          }}else {
23              if ((x+y)==(2*n)+1) {
24                  printf("%d", (ans+y) );
25                  ans++;
26                  c++;
27
28              }else if((x+y) <= (2*n)+1){
29                  printf("%d", (ans+y)*10);
30                  ans ++;
31                  c ++;
32              }
33          }
34      x++;
35      }
36      y++;
37      printf("\n");
38  }
39  z++;
40  }
41 }
```

	Input	Expected	Got	
✓	3	Case #1	Case #1	✓
	3	10203010011012	10203010011012	
	4	**4050809	**4050809	
	5	****607	****607	
		Case #2	Case #2	



*****10011		*****10011	
Case #3		Case #3	
102030405026027028029030		102030405026027028029030	
**6070809022023024025		**6070809022023024025	
****10011012019020021		****10011012019020021	
*****13014017018		*****13014017018	
*****15016		*****15016	

Passed all tests! ✓

Finish review