Week 5 -1

Roll no: 240801177

Name: Logaranjan R J

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Monday, 9 December 2024, 2:58 PM
Duration	14 days 2 hours

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

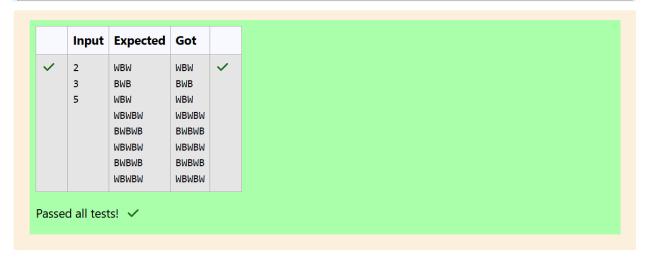
3

5

Output:		
WBW		
BWB		
WBW WBWBW		
BWBWB		
WBWBW		
BWBWB		
WBWBW		

Answer:(penalty regime: 0 %)

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



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
Input:
2
2 W
3 B
Output:
WB
BW
BWB
WBW
BWB
Answer:(penalty regime: 0 %)

```
#include <stdio.h>
 2 v int main(){
3
        int T,N;
4
        char c;
5
        scanf("%d",&T);
        for (int t=0;t<T;t++)</pre>
 6
7 ▽
             scanf("%d %c",&N ,&c);
8
9
             char f=c;
             char s= (c=='W')?'B':'W';
10
             for (int i=0;i<N;i++)</pre>
11
12 v
13
                 for (int j=0;j<N;j++)</pre>
14 v
                      if ((i+j)\%2==0)
15
                      printf("%c",f);
16
17
                     else
                     printf("%c",s);
18
19
                printf("\n");
20
21
22
                 }
23
24
```



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:
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
Output
```

First line print Case #i where i is the test case number

In the subsequent line, print the pattern

Test Case 1

```
3
```

4

5

Output

Case #1

10203010011012

**4050809

****607

Case #2

1020304017018019020

**50607014015016

****809012013

*****10011

Case #3

102030405026027028029030

**6070809022023024025

****10011012019020021

*****13014017018

******15016

Answer:(penalty regime: 0 %)

```
#include <stdio.h>
 1
 2 ▼
     int main(){
 3
         int p,q,r,s,t=1,u,ans,v;
         scanf("%d",&p);
 4
 5
         while (t<=p)</pre>
 6
              scanf("%d",&q);
 7
 8
              printf("Case #%d \n",t);
 9
              s=1;
10
              u=1;
11
              v=0;
12
              while(s<=q)</pre>
13 v
              {
14
                  r=1;
15
                  ans=(q*q);
16
                  ans=ans-v;
17
                  while(r<=2*q)</pre>
18 🔻
                       if(r<=q)
19
20 ₹
                       {
                       if(r<s)</pre>
21
22 v
                       {
                            printf("**");
23
24
                       }
25
                       else if (r<=q)</pre>
26 🔻
27
                            printf("%d",u*10);
28
```

```
28
                          u++;
29
                      }
30 1
                  }else {
31
                      if (r+s==(2*q)+1)
32 ₹
                      {
33
34
                          printf("%d",(ans+s));
35
                          ans++;
36
                          ۷++;
37
38 1
                      else if (r+s<=(2*q)+1){</pre>
39
                          printf("%d",(ans+s)*10);
40
                          ans++;
41
                          v++;
42
                      }
43
                 }
44
                 r++;
45
             }
46
47
             s++;
48
             printf("\n");
49
50
        t++;
51
52
    return 0;}
53
```

	Input	Expected	Got	
~	3	Case #1	Case #1	V
	3	10203010011012	10203010011012	
	4	**4050809	**4050809	
	5	****607	****607	
		Case #2	Case #2	
		1020304017018019020	1020304017018019020	
		**50607014015016	**50607014015016	
		****809012013	****809012013	
		*****10011	*****10011	
		Case #3	Case #3	
		102030405026027028029030	102030405026027028029030	
		**6070809022023024025	**6070809022023024025	
		****10011012019020021	****10011012019020021	
		*****13014017018	*****13014017018	
		******15016	******15016	

Passed all tests! 🗸