Week 5 – 1:

ROLL NO.:240801179

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Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Thursday, 19 December 2024, 9:18 AM
Duration	4 days 8 hours

Q1) 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

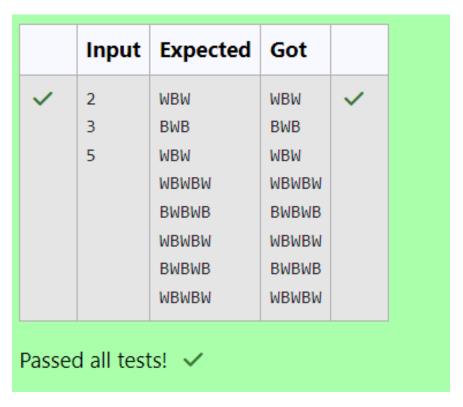
BWBWB

WBWBW

Code:

```
#include<stdio.h>
 1
    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
 9
             for(int i=0;i<size;i++)</pre>
10 🔻
             {
                  for(int j=0;j<size;j++)</pre>
11
12 🔻
13
                      if((i+j)\%2==0)
14
                      printf("W");
15
                      else
                      printf("B");
16
17
                 printf("\n");
18
19
20
21
    }
```

OUTPUT:



Q2) 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

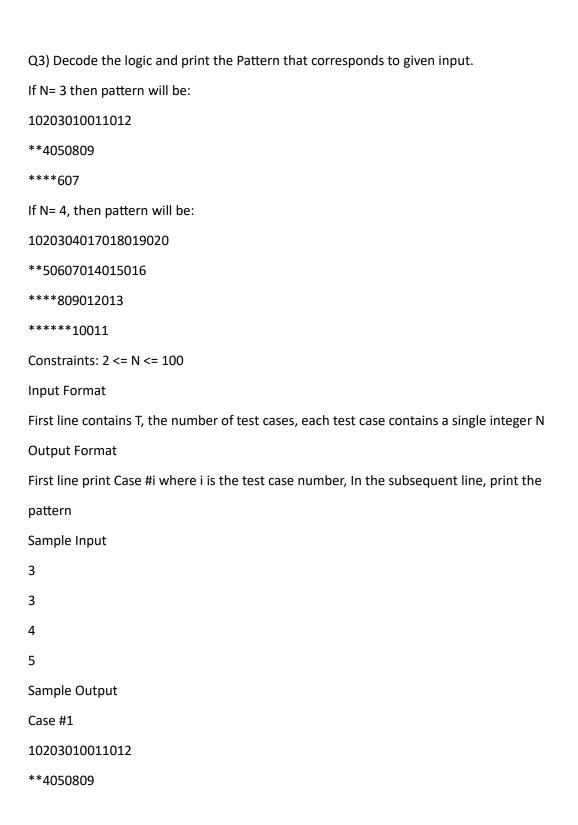
Code:

```
#include<stdio.h>
1
 2
    int main()
 3 ▼ {
        int T,N;
 4
 5
        char c;
 6
        scanf("%d",&T);
        for(int t=0;t<T;t++)</pre>
 7
 8 ,
             scanf("%d %c",&N,&c);
 9
10
             char f=c;
11
             char s=(c=='W')?'B':'W';
12
             for(int i=0;i<N;i++)</pre>
13 🔻
                 for(int j=0;j<N;j++)</pre>
14
15 🔻
16
                     if((i+j)\%2==0)
17
                     printf("%c",f);
18
                     else
                     printf("%c",s);
19
20
                 printf("\n");
21
             }
22
23
        }
24 }
```

OUTPUT:

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

Passed all tests! 🗸



```
****607
Case #2
1020304017018019020

**50607014015016

****809012013

******10011
Case #3
102030405026027028029030

**6070809022023024025

****10011012019020021

******13014017018

*******15016
```

Code:

```
int main()
             int p,q,r,s,t=1,u,ans,v;
scanf("%d",&p);
while(t<=p)
{</pre>
                   scanf("%d",&q);
printf("Case #%d \n",t);
s=1;
u=1;
v=0;
while(s<=q)
f
f</pre>
{
                          r=1;
ans=(q*q);
ans=ans-v;
while(r<=2*q)
{
                                 if(r<=q)
                                 {
                                       if(r<s)
                                       {
                                             printf("**");
                                        else if(r<=q)
                                              printf("%d",u*10);
                                 }else{
    if(r+s==(2*q)+1)
    {
                                             printf("%d",(ans+s));
ans++;
                                              ٧++;
                                       felse if(r+s<=(2*q)+1){
   printf("%d",(ans+s)*10);</pre>
                                              ans++;
v++;
                          s++;
printf("\n");
50
51
52 }
```

OUTPUT:

	Input	Expected	Got	
~	3	Case #1	Case #1	~
	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! ✓