WEEK -05-01

Ex.no : 28 Date : 8.11.2024

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

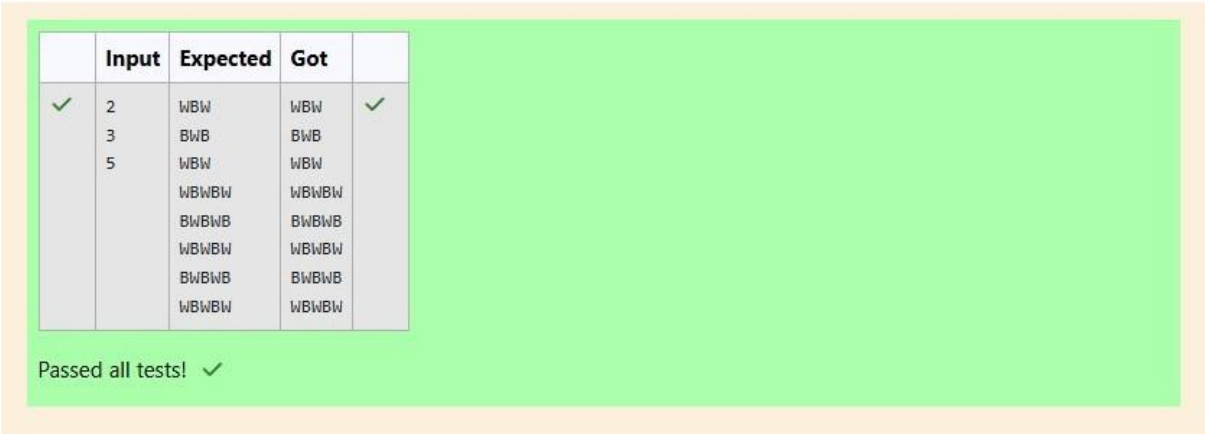
Output:

PROGRAM:

```c
#include<stdio.h>
int main()
{
    int T,d,i=0,i1,i2,a;
    char c;
    scanf("%d",&T);
    while(i<T)
    {
        scanf("%d",&d);
        i1=0;
        while(i1<d)
        {
            a=1;
            i2=0;
            if(i1%2==a)
            {
                a=0;
            }
            while(i2<d)
            {
                c='W';
                if(i2%2==a)
                {
                    c='B';
                }
                printf("%c",c);
                i2++;
            }
            i1+=1;
            printf("\n");
        }
        i++;;
    }
    return 0;
```

.

OUTPUT:



	Input	Expected	Got	
✓	2 3 5	WBW BWB WBW WBWBW BWBWB WBWBW BWBWB WBWBW	WBW BWB WBW WBWBW BWBWB WBWBW BWBWB WBWBW	✓

Passed all tests! ✓

WEEK -05-01

Ex.no : 29 Date : 8.11.2024

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

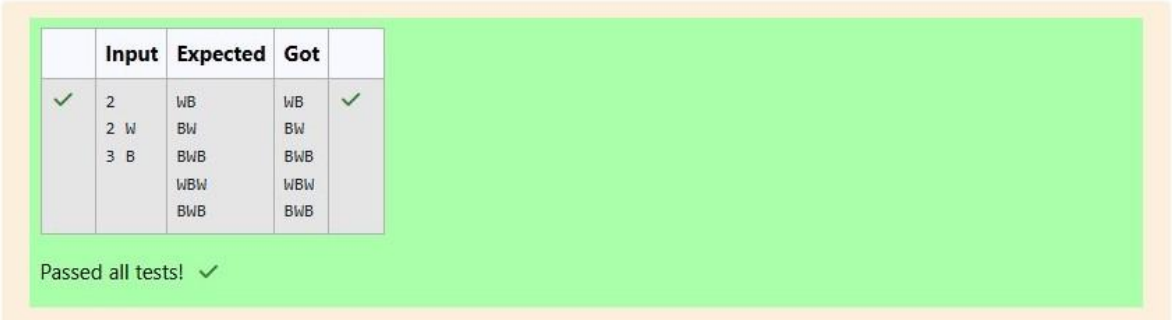
Output:

PROGRAM:

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int T,d,i,i1,i2,a,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;
            a=(i1%2==Z)?0:1;
            for(i2=0;i2<d;i2++)
            {
                c=(i2%2==a)?'W':'B';
                printf("%c",c);
            }
            printf("\n");
        }
    }
    return 0;
}
```

OUTPUT:



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

Passed all tests! ✓

Ex.no : 30 Date : 8.11.2024

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

PROGRAM:

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

OUTPUT:

	Input	Expected	Got	
✓	3 3 4 5	Case #1 10203010011012 **4050809 ****607 Case #2 1020304017018019020 **50607014015016 ****809012013 ******10011 Case #3 10203040502602702802903 0 **6070809022023024025 ****10011012019020021 ******13014017018 ********15016	Case #1 10203010011012 **4050809 ****607 Case #2 1020304017018019020 **50607014015016 ****809012013 ******10011 Case #3 10203040502602702802903 0 **6070809022023024025 ****10011012019020021 ******13014017018 ********15016	✓

Passed all tests! ✓