GE23131-Programming Using C-2024

Status	Finished
Started	Tuesday, 24 December 2024, 8:20 AM
Completed	Tuesday, 24 December 2024, 8:39 AM
Duration	19 mins 29 secs

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
5

Output:

WBW
BWB
WBW
WBWBW
BWBWB
WBWBW
BWBWB
WBWBW

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int a,b,i,j;
    scanf("%d",&a);
    while(a--)
    {
        scanf("%d",&b);
        for(i=0;i<b;i++)
        {
            for(j=0;j<b;j++)
            {
                if((i+j)%2==0)
                printf("W");
                else printf("B");
            }
            printf("\n");
        }
    }
}
```

	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! ✓

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

Input:

2

2 W

3 B

Output:

WB

BW

BWB

WBW

BWB

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
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 2 W 3 B	WB BW BWB WBW BWB	WB BW BWB WBW BWB	✓

Passed all tests! ✓

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

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 %)

```c
#include<stdio.h>
int main()
{
    int a,b,c,d,e,f,i,j,k,n;
    scanf("%d",&a);
    for(b=0;b<a;b++)
    {
        c=0;
        scanf("%d",&n);
        printf("Case #%d\n",b+1);
        for(i=0;i<n;i++)
        {
            d=0;
            if(i>0)
            {
                for(j=0;j<i;j++)
                printf("**");
            }
            for(j=i;j<n;j++)
            {
                if(i>0)
                d++;
                printf("%d0",++c);
            }
            if(i==0)
            {
                e=c+(c*(c-1))+1;f=e;
            }
            f=f-d;e=f;
            for(k=i;k<n;k++)
            {
                printf("%d",e++);
                if(k!=n-1)printf("0");
            }printf("\n");
        }
    }
}
```

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

| ********15016 | ********15016 |

Passed all tests! ✓