# GE23131-Programming Using C-2024

## Quiz navigation

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|---:|:---|
| **Status** | Finished |
| **Started** | Monday, 23 December 2024, 5:33 PM |
| **Completed** | Saturday, 14 December 2024, 2:24 PM |
| **Duration** | 9 days 3 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

5

Output:

WBW

BWB

WBW

WBWBW

BWBWB

WBWBW

BWBWB

WBWBW

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

```
 4          char c;
 5          scanf("%d",&T);
 6 ▼        while(i<T){
 7              scanf("%d",&d);
 8              i1=0;
 9 ▼            while(i1<d){
10                  o=1;
11                  i2=0;
12 ▼                if(i1%2==0){
13                      o=0;
14                  }
15 ▼                while(i2<d){
16                      c='B';
17 ▼                    if(i2%2==o){
18                          c='W';
19                      }
20                      printf("%c",c);
21                      i2++;
22                  }
23                  i1+=1;
24                  printf("\n");
25              }
26              i+=1;
27          }
28
29 }
```

| | Input | Expected | Got | |
|---|---|---|---|---|
| ✓ | 2<br>3<br>5 | WBW<br>BWB<br>WBW<br>WBWBW<br>BWBWB<br>WBWBW<br>BWBWB<br>WBWBW | WBW<br>BWB<br>WBW<br>WBWBW<br>BWBWB<br>WBWBW<br>BWBWB<br>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

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,o,i2,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<br>2 W<br>3 B | WB<br>BW<br>BWB | WB<br>BW<br>BWB | ✓ |

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:

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

5

Output

Case #1

10203010011012

**4050809

****607

Case #2

1020304017018019020

**50607014015016

****809012013

******10011

Case #3

1020304050260270280 29030

**6070809022023024025

****10011012019020021

******13014017018

********15016

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

```c
#include<stdio.h>
int main(){
    int n,v,p3,c,in,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(int 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){
                p3=v+(v*(v-1))+1;
                in=p3;
            }
            in-=c;
            p3=in;
            for(i2=i;i2<n;i2++){
                printf("%d",p3++);
                if(i2!=n-1) printf("0");
```

```
31      }
32    }
```

| | Input | Expected | Got | |
|---|---|---|---|---|
| ✓ | 3<br>3<br>4<br>5 | Case #1<br>10203010011012<br>**4050809<br>****607<br>Case #2<br>1020304017018019020<br>**50607014015016<br>****809012013<br>******10011<br>Case #3<br>10203040502602702802 9030<br>**6070809022023024025<br>****10011012019020021<br>******13014017018<br>********15016 | Case #1<br>10203010011012<br>**4050809<br>****607<br>Case #2<br>1020304017018019020<br>**50607014015016<br>****809012013<br>******10011<br>Case #3<br>10203040502602702802 9030<br>**6070809022023024025<br>****10011012019020021<br>******13014017018<br>********15016 | ✓ |

Passed all tests! ✓

Finish review