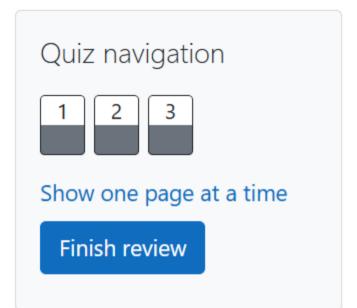
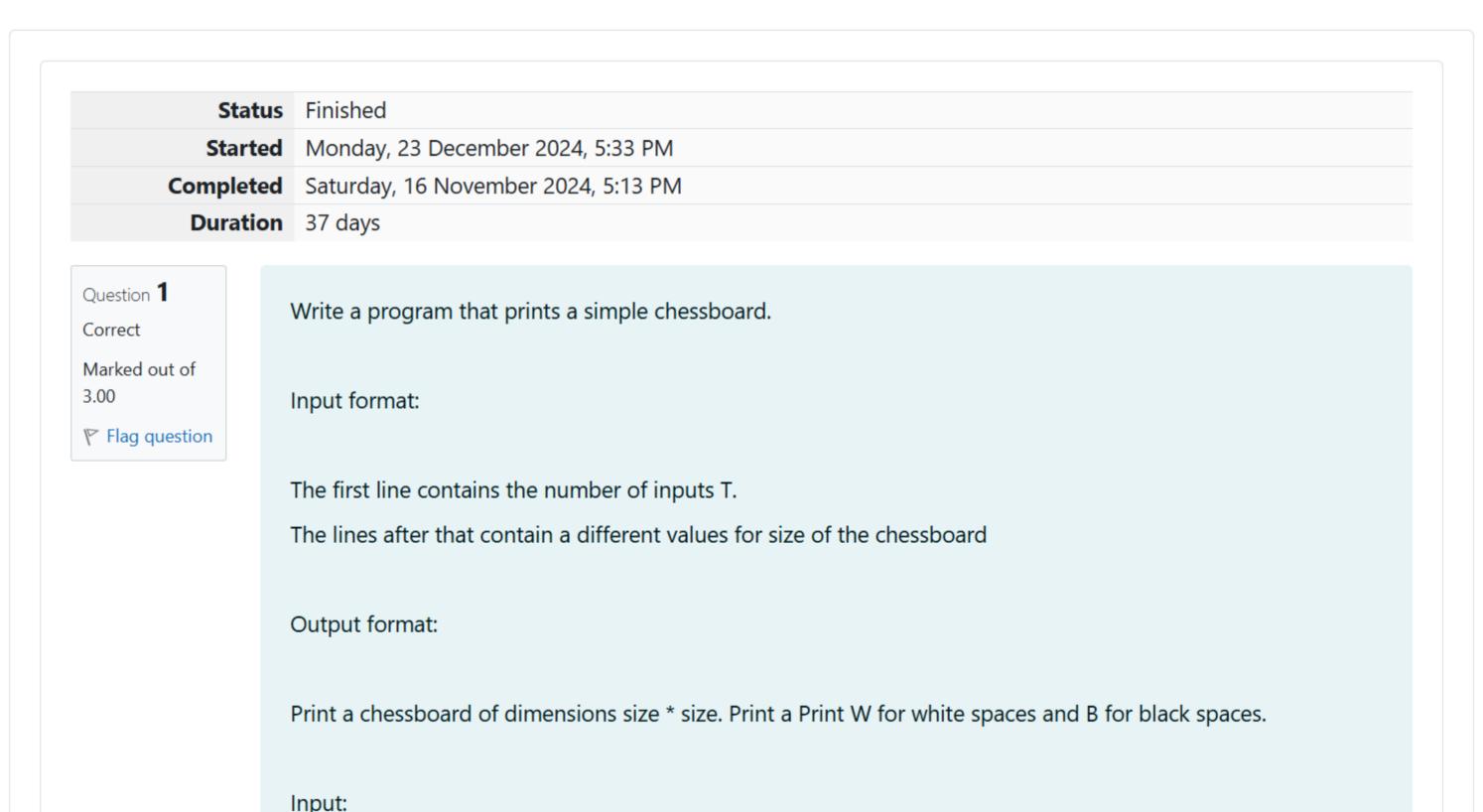
GE23131-Programming Using C-2024





```
WBW
BWB
WBW
WBWBW
BWBWB
WBWBW
BWBWB
WBWBW
Answer: (penalty regime: 0 %)
   1 #include<stdio.h>
     int main()
         int t;
         scanf("%d",&t);
         while(t>0)
             int x;
```

3

5

Output:

```
Answer: (penalty regime: 0 %)
   1 #include<stdio.h>
      int main()
   3 ₹ {
           int t;
           scanf("%d",&t);
           while(t>0)
               int x;
               scanf("%d",&x);
               if(x<0)
  10
  11 1
  12
                   x=-x;
  13
  14
               char a='W';
  15
               for(int i=0;i<x;i++)</pre>
  16
  17 v
                   for(int j=0;j<x;j++)</pre>
  18
  19 🔻
                        printf("%c",a);
  20
                        if(a=='W')
  21
                        a='B';
  22
  23
                        else
                        a='W';
  24
  25
                   printf("\n");
  26
                   if(x\%2==0)
  27
  28 ₹
                        if(a=='W')
  29
                        a='B';
  30
                        else
  31
                        a='W';
  32
```

```
1†(X<0)
10
11 v
12
                 x=-x;
13
14
             char a='W';
15
16
             for(int i=0;i<x;i++)</pre>
17 v
                 for(int j=0;j<x;j++)</pre>
18
19 ₹
                     printf("%c",a);
20
                     if(a=='W')
21
                     a='B';
22
                     else
23
                     a='W';
24
25
                printf("\n");
26
                 if(x\%2==0)
27
28
                     if(a=='W')
29
                     a='B';
30
                     else
31
                     a='W';
32
33
34
35
                t--;
36
37
                 return 0;
38
39
40
41
```

```
28 ₹
                   if(a=='W')
29
                   a='B';
30
                   else
31
                   a='W';
32
33
34
35
               t--;
36
37
               return 0;
38
39
40
41
```

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

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 %)
   1 #include<stdio.h>
      int main()
   3 ₹ {
           int T,d,x,i,j,o,z;
           char c,s;
           scanf("%d",&T);
           for(x=0;x<T;x++)</pre>
   8 ₹
               scanf("%d %c",&d,&s);
               for(i=0;i<d;i++)</pre>
  10
  11 v
                   z=(s=='W') ? 0:1;
  12
                   o=(i%2==z) ? 0:1;
  13
                   for(j=0;j<d;j++)</pre>
  14
  15 ₹
                       c=(j%2==o) ? 'W' : 'B';
  16
                       printf("%c",c);
  17
  18
                   nnin+f("\n").
```

Output:

BWB

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
    int main()
3 ₹
        int T,d,x,i,j,o,z;
        char c,s;
        scanf("%d",&T);
        for(x=0;x<T;x++)</pre>
8 ₹
             scanf("%d %c",&d,&s);
            for(i=0;i<d;i++)</pre>
10
11 🔻
                 z=(s=='W') ? 0:1;
12
                 o=(i%2==z) ? 0:1;
13
                 for(j=0;j<d;j++)</pre>
14
15 v
                     c=(j%2==o) ? 'W' : 'B';
16
                     printf("%c",c);
17
18
                 printf("\n");
19
20
21
22
23
24
        return 0;
25
```

```
16
17
18
19
20
21
22
23
24
    return 0;
25
}

c=(j%2==o) ? 'W' : 'B';
printf("%c",c);
}
printf("\n");

return 0;
}
```

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

Question **3**

Correct

Marked out of 7.00

Decode the logic and print the Pattern that corresponds to given input.

If N= 3

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

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

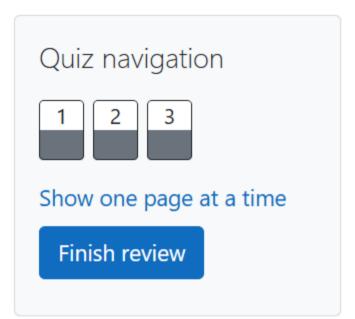
```
Output
Case #1
10203010011012
**4050809
****607
Case #2
1020304017018019020
**50607014015016
****809012013
*****10011
Case #3
102030405026027028029030
**6070809022023024025
****10011012019020021
*****13014017018
******15016
Answer: (penalty regime: 0 %)
   1 #include<stdio.h>
```

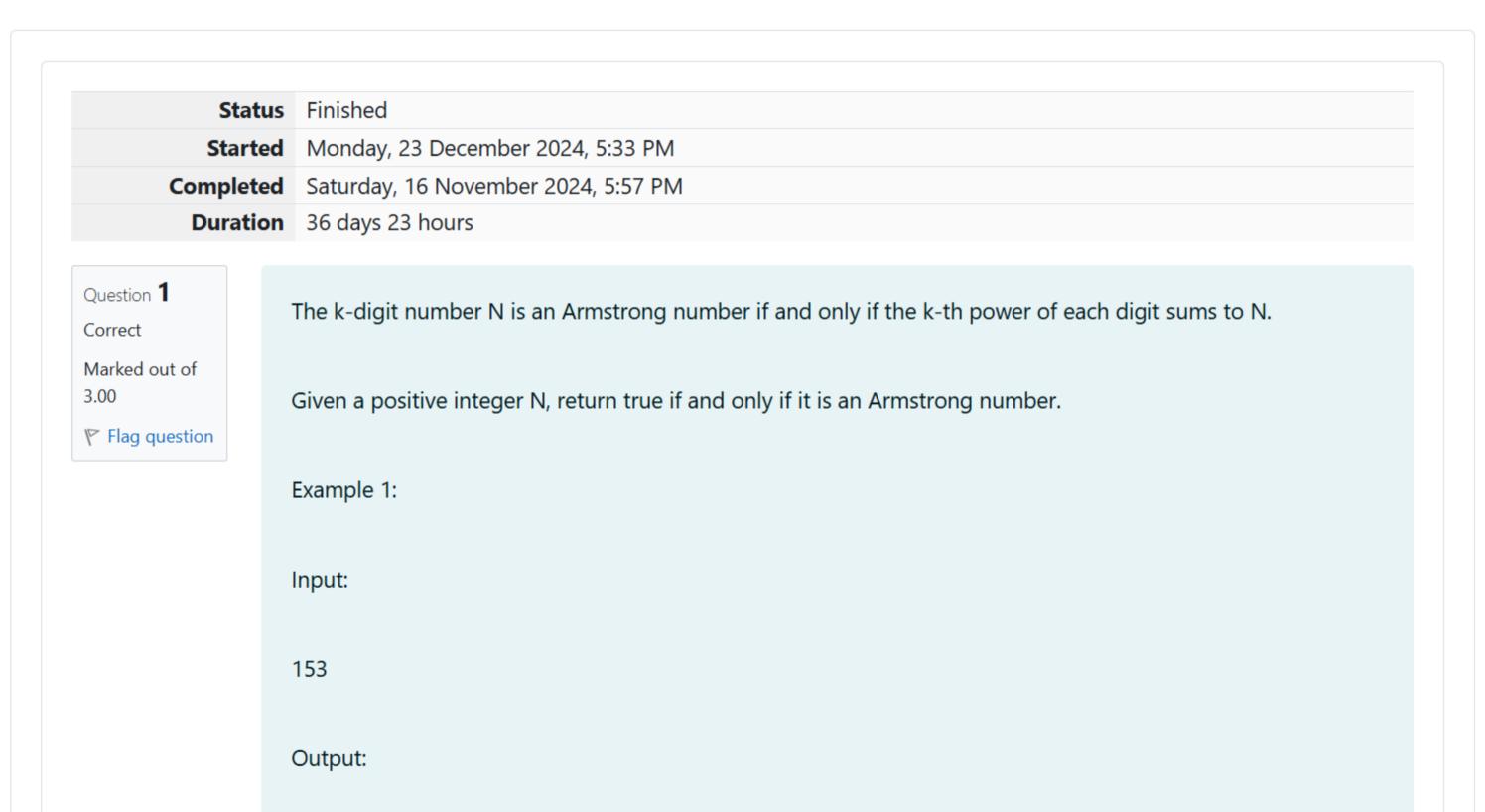
```
Answer: (penalty regime: 0 %)
   1 #include<stdio.h>
       int main()
   3 ₹
           int n,v,p3,c,in,i,i1,i2,t,ti;
           scanf("%d",&t);
           for(ti=0;ti<t;ti++)</pre>
                v=0;
                scanf("%d",&n);
                printf( "Case #%d\n",ti+1);
   10
                for(i=0;i<n;i++)</pre>
  11
  12 1
  13
                    c=0;
                    if(i>0)
   14
  15
                        for(i1=0;i1<i;i1++)</pre>
   16
                        printf("**");
   17
   18
                    for(i1=i;i1<n;i1++)</pre>
   19
   20
                        if(i>0)
   21
   22
                        c++;
                        printf("%d0",++v);
   23
   24
                    if(i==0)
   25
   26
                        p3=v+(v*(v-1))+1;
   27
   28
                        in=p3;
   29
   30
                    in=in-c;
   31
   32
                    p3=in;
                    for(i2=i:i2<n:i2++)
   33
```

```
printf("**");
17
18
                for(i1=i;i1<n;i1++)</pre>
19
20
                     if(i>0)
21
22
                     c++;
                     printf("%d0",++v);
23
24
                 if(i==0)
25
26
                     p3=v+(v*(v-1))+1;
27
                     in=p3;
28
29
30
                 in=in-c;
31
                 p3=in;
32
                for(i2=i;i2<n;i2++)</pre>
33
34
                     printf("%d",p3++);
35
                     if(i2!=n-1)
36
                     printf("0");
37
38
39
                 printf("\n");
40
41
42
                 return 0;
43
44
45
```

	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

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true
Explanation:
153 is a 3-digit number, and 153 = 1^3 + 5^3 + 3^3.
Example 2:
Input:
123
Output:
false
Explanation:
123 is a 3-digit number, and 123 != 1^3 + 2^3 + 3^3 = 36.

1634 Output: true Note: 1 <= N <= 10^8 **Answer:** (penalty regime: 0 %) 1 #include<stdio.h> 2 #include<math.h> 3 int main() 4 ₹ { int n,n2; scanf("%d",&n); int x=0;

Example 3:

Input:

```
1 #include<stdio.h>
   #include<math.h>
    int main()
        int n,n2;
        scanf("%d",&n);
        int x=0;
        n2=n;
        while (n2!=0)
10 ₹
            x++;
11
            n2=n2/10;
12
13
        int sum=0;
14
        int n3=n,n4;
15
        while(n3!=0)
16
17 1
            n4=n3%10;
18
            sum=sum+pow(n4,x);
19
20
            n3=n3/10;
21
        if(n==sum)
22
23 ₹
            printf("true");
24
25
        else
26
27 ₹
            printf("false");
28
29
30
        return 0;
31
```

```
1 (11--3um)
23
            printf("true");
24
25
26
        else
27
            printf("false");
28
29
30
        return 0;
31
```

	Input	Expected	Got	
~	153	true	true	~
~	123	false	false	~

Question **2**

Correct

Marked out of 5.00

▼ Flag question

Take a number, reverse it and add it to the original number until the obtained number is a palindrome. Constraints 1<=num<=99999999 Sample Input 1 32 Sample Output 1 55 Sample Input 2 789 Sample Output 2 66066

Answer: (penalty regime: 0 %)

- 1 #include<stdio.h>

Question **2**

Correct

Marked out of 5.00

Flag question

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
    int main()
3 ₹
        int rn,n,nt=0,i=0;
        scanf("%d",&n);
        do{
            nt=n;
            rn=0;
            while(n!=0)
10
                rn=rn*10+n%10;
11
                n=n/10;
12
13
14
            n=nt+rn;
15
            i++;
16
        while((rn!=nt) | |(i==1));
17
18
        printf("%d",rn);
19
20
21
22
        return 0;
23
24
```

```
15 | i++;
16 | }
17 | while((rn!=nt) ||(i==1));
18 | printf("%d",rn);
20 | 21 | | return 0;
23 | 24 | }
```

	Input	Expected	Got	
~	32	55	55	~
~	789	66066	66066	~

Question ${\bf 3}$

Correct

Marked out of 7.00

Flag question

A number is considered lucky if it contains either 3 or 4 or 3 and 4 both in it. Write a program to print the nth lucky number. Example, 1st lucky number is 3, and 2nd lucky number is 4 and 3rd lucky number is 33 and 4th lucky number is 34 and so on. Note that 13, 40 etc., are not lucky as they have other numbers in it.

The program should accept a number 'n' as input and display the nth lucky number as output.

Question 3 A number is considered lucky if it contains either 3 or 4 or 3 and 4 both in it. Write a program to print the nth Correct lucky number. Example, 1st lucky number is 3, and 2nd lucky number is 4 and 3rd lucky number is 33 and 4th Marked out of lucky number is 34 and so on. Note that 13, 40 etc., are not lucky as they have other numbers in it. 7.00 Flag question The program should accept a number 'n' as input and display the nth lucky number as output. Sample Input 1: 3 Sample Output 1: 33 Explanation: Here the lucky numbers are 3, 4, 33, 34., and the 3rd lucky number is 33. Sample Input 2: 34

3 Sample Output 1: 33 Explanation: Here the lucky numbers are 3, 4, 33, 34., and the 3rd lucky number is 33. Sample Input 2: 34 Sample Output 2: 33344

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

```
1 #include<stdio.h>
    int main()
3 ₹
        int n=1,i=0,co=0,e,nt;
        scanf("%d",&e);
        while(i<e)</pre>
            nt=n;
            while(nt!=0)
10 ₹
                co=0;
11
                if(nt%10!=3 && nt%10!=4)
12
13 v
                    co=1;
14
                    break;
15
16
17
                nt=nt/10;
18
19
            if(co==0)
20
21 1
                i++;
22
23
            n++;
24
25
        printf("%d",--n);
26
27
        return 0;
28
29
```

```
T⊃ A
14
                    co=1;
                    break;
15
16
                nt=nt/10;
17
18
19
            if(co==0)
20
21 🔻
                i++;
22
23
24
            n++;
25
        printf("%d",--n);
26
27
        return 0;
28
29
```

	Input	Expected	Got	
~	34	33344	33344	~

Finish review