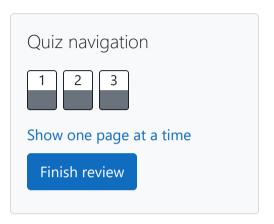
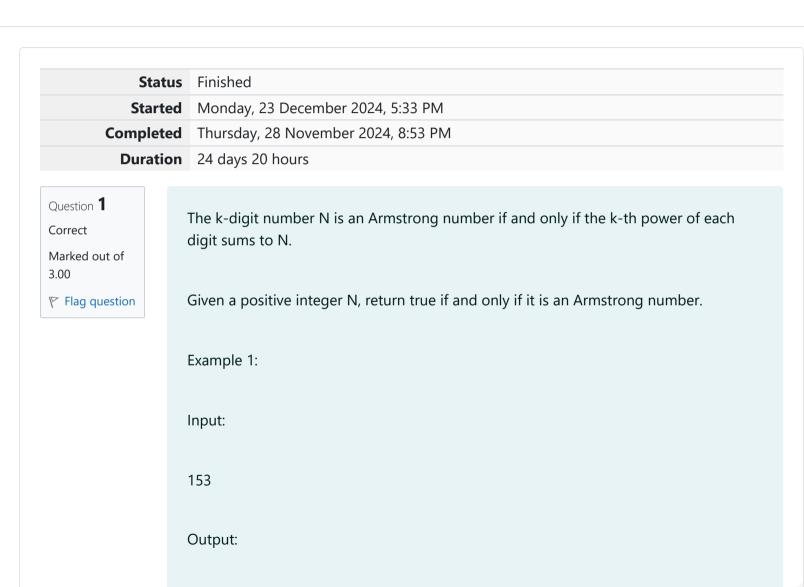
GE23131-Programming Using C-2024





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. Example 3: Input: 1634 Output: true

Note:

```
1 <= N <= 10^8
```

```
#include<stdio.h>
    #include<math.h>
 2
    int main()
 3
 4 ▼ {
        int n;
 5
        scanf("%d",&n);
        int x=0,n2=n;
 7
        while(n2!=0)
 8
 9 1
10
            X++;
            n2=n2/10;
11
12
        int sum=0;
13
14
        int n3=n,n4;
15
        while(n3!=0)
16 🔻
17
            n4=n3%10;
18
            sum=sum+pow(n4,x);
19
            n3=n3/10;
20
21
        if(n==sum)
22 🔻
            printf("true");
23
24
25
        else
26 •
            printf("false");
27
28
29
        return 0;
30
```

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

Passed all tests! <

Question **2**

Correct

Marked out of 5.00

Flag question

```
#include<stdio.h>
    int main()
 2
 3 1
        int rn,n,nt=0,i=0;
        scanf("%d",&n);
        do
 7 🔻
            nt=n;rn=0;
 8
            while(n!=0)
 9
10
                rn=rn*10+n%10;
11
12
                n=n/10;
13
            n=nt+rn;
14
15
            i++;
16
        while(rn!=nt || i==1);
17
        printf("%d",rn);
18
19
        return 0;
20
```

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

Passed all tests! <

Question **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.

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

Sample Output 2:

33344

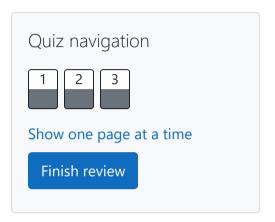
```
#include<stdio.h>
    int main()
 2
 3 ₹ {
        int n=1,i=0,nt,co=0,e;
 4
        scanf("%d",&e);
 5
        while(i<e)</pre>
 7 🔻
 8
             nt=n;
             while(nt!=0)
10 🔻
11
                 co=0;
12
                 if(nt%10!=3 && nt%10!=4)
13 🔻
14
                     co=1;
15
                     break;
16
17
                 nt=nt/10;
18
19
             if(co==0)
20 🔻
21
                 i++:
```

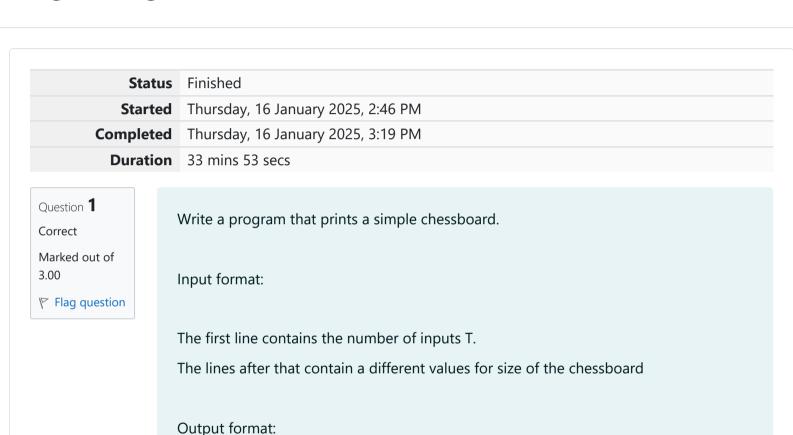
	Input	Expected	Got	
~	34	33344	33344	~

Passed all tests! ✓

Finish review

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Print a chessboard of dimensions size * size. Print a Print W for white spaces and B for black spaces.

2

Input:

3

5

Output:

WBW

BWB

WBW

WBWBW

BWBWB

WBWBW

BWBWB

WBWBW

```
1 #include<stdio.h>
 2 v int main(){
        int v;
 3
         scanf("%d",&v);
        while(v>0){
 5 🔻
 6
             int x;
             scanf("%d",&x);
 8 ,
             if(x<0){
 9
                 x=-x;
10
11
             char a = 'W';
             for(int i=0;i<x;i++){</pre>
12 🔻
13 🔻
                 for(int j=0;j<x;j++){</pre>
                     printf("%c",a);
14
15
                     if(a=='W')
16
                     a='B';
                     else
17
                      a='W';
18
19
                 printf("\n");
20
```

```
21 ₹
                1†(X%2==0){
22
                     if(a=='W')
                     a='B';
23
24
                     else
                     a='W';
25
26
27
28
            V--;
29
30
```

	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!

Passed all tests! <

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> 2 v int main(){ 3 int v; scanf("%d",&v); while(v!=0){ char a; int x; scanf("%d %c",&x,&a); for(int i=0:i<x:i++){

```
for(int j=0;j<x;j++){</pre>
10 🔻
11
                     printf("%c",a);
                     if(a=='W'){
12 🔻
                          a='B';
13
14
15 🔻
                      else{
                          a='W';
16
17
18
                 if((x\%2)==0){
19 🔻
                     if (a=='W')
20
21
                      a='B';
22
                      else
23
                      a='W';
24
                 printf("\n");
25
26
27
             V--;
28
29
```

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

Passed all tests! <

Question ${\bf 3}$

Correct

Marked out of 7.00

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
5
Output
Case #1
10203010011012
**4050809
****607
Case #2
1020304017018019020
**50607014015016
****809012013
*****10011
Case #3
102030405026027028029030
**6070809022023024025
****10011012019020021
*****13014017018
******15016
```

```
#include<stdio.h>
    int main(){
 2 ▼
        int v,c=0;
 3
         scanf("%d",&v);
        while(v!=0){
 5 1
             C++;
             int a;
 7
             scanf("%d",&a);
 8
 9
             int s1=10, s2=(a*a*10)+10;
             printf("Case #%d\n",c);
10
             for (int i=0;i<a;i++){</pre>
11
                 for (int j=0;j<i;j++){</pre>
12 🔻
                     printf("**");
13
14
15 1
                 for(int j=0;j<a-i;j++){</pre>
                     printf("%d",s1);
16
17
                      s1+=10;
18
                 for (int j=0;j<a-i;j++){</pre>
19
                      if((j+1)==(a-i)){
20
                          printf("%d",((s2+(j*10))/10));
21
22
23 🔻
                      else{
                          printf("%d",(s2+(j*10)));
24
25
26
27
                 s2 -= (a-i)*10;
                 s2+=10;
28
29
                 printf("\n");
30
31
             V--;
32
33
```



Passed all tests! ✓

Finish review