## WEEK 5

```
Output:
WBW
BWB
WBW
WBWBW
BWBWB
WBWBW
BWBWB
WBWBW
Answer: (penalty regime: 0 %)
      #include <stdio.h>
   2 v
      int main(){
   3
          int T,d,i=0,i1,i2,o;
           char c;
   4
           scanf("%d",&T);
   5
          while (i<T){
   6 ,
   7
              scanf("%d",&d);
   8
              i1=0;
              while(i1<d){
   9 ,
  10
                  o=1;
  11
                  i2=0;
                  if(i1%2==0){
  12 ,
  13
                      0=0;
  14
                  }
  15 ,
                  while(i2<d){
                     c='B';
  16
                      if(i2%2==o){
  17 ,
  18
                         c='W';
  19
  20
                      printf("%c",c);
  21
                      i2++;
  22
  23
                  i1+=1;
                  printf("\n");
  24
  25
  26
              i=i+1;
  27
           return 0;
  28
  29
```

	Input	Expected	Got	
~	2	WBW	WBW	~
	3	BWB	BWB	

```
Output:

WB
BW
BWB
WBW
BWB
```

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
 2 v int main(){
 3
        int T,d,i,i1,i2,o,z;
4
        char c,s;
 5
        scanf("%d",&T);
 6 +
        for(i=0;i<T;i++){</pre>
            scanf("%d %c",&d,&s);
 7
8 ,
            for(i1=0;i1<d;i1++){
                 z=(s=='W')?0:1;
9
                 o=(i1%2==z)?0:1;
10
                 for(i2=0;i2<d;i2++){
11 *
12
                     c=(i2%2==o)?'W':'B';
13
                     printf("%c",c);
14
                 printf("\n");
15
16
17
18
        return 0;
19
   1}
```

	Input	Expected	Got	
~	2 2 W	WB BW	WB BW	~

```
****10011012019020021

*****13014017018

*******15016
```

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
 2 v int main(){
 3
         int n,v,p3,c,in,i,i1,i2,t,ti;
         scanf("%d",&t);
 4
 5 ,
         for (ti=0;ti<t;ti++){</pre>
 6
             v=0;
 7
             scanf("%d",&n);
             printf("Case #%d\n",ti+1);
 8
 9,
             for(i=0;i<n;i++){</pre>
10
                 c=0;
                  if(i>0){
11 v
                      for(i1=0;i1<i;i1++) printf("**");</pre>
12
13
             for(i1=i;i1<n;i1++){</pre>
14 •
                 if(i>0) c++;
15
                  printf("%d0",++v);
16
17
18 •
             if(i==0){
                 p3=v+(v*(v-1))+1;
19
20
                  in=p3;}
21
             in=in-c;
22
             p3=in;
             for(i2=i;i2<n;i2++){</pre>
23 v
                  printf("%d",p3++);
24
25
                  if(i2!=n-1) printf("0");}
26
             printf("\n");
27
28
29
30
         return 0;
31
```

	Input	Expected	Got	
~	3	Case #1	Case #1	<b>~</b>

```
1634

Output:

true

Note:

1 <= N <= 10^8

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

```
#include <stdio.h>
    #include <math.h>
 2
 3 v int main(){
        int n;
 4
        scanf("%d",&n);
 5
 6
        int x=0, n2=n;
 7 .
        while(n2!=0){
 8
            X++;
 9
             n2=n2/10;}
        int sum=0;
10
        int n3=n,n4;
11
12 *
        while(n3!=0){
13
             n4=n3%10;
14
             sum+=pow(n4,x);
15
            n3=n3/10;}
        if(n==sum)
16
            printf("true");
17
18
        else
            printf("false");
19
20
        return 0;}
21
```

	Input	Expected	Got	
~	153	true	true	~

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>
 2 v int main(){
 3
         int rn,n,nt=0,i=0;
         scanf("%d",&n);
 4
 5 ,
        do{
            nt=n;rn=0;
 6
            while(n!=0){
             rn=rn*10+n%10;
n=n/10;}
 8
 9
10
           n=nt+rn;
           i++;}
11
        while(rn!=nt||i==1);
printf("%d",rn);
return 0;}
12
13
14
```

	Input	Expected	Got	
<b>~</b>	32	55	55	<b>~</b>
<b>~</b>	789	66066	66066	<b>~</b>

Passed all tests! 🗸

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 %)

```
#include <stdio.h>
 1
 2 v int main(){
 3
        int n=1,i=0,nt,co=0,e;
        scanf("%d",&e);
 4
 5 +
        while(i<e){
 6
            nt=n;
 7 ,
            while(nt!=0){
               co=0;
 8
 9 ,
               if(nt%10!=3 && nt%10!=4){
10
                  co=1;
11
                   break;}
12
               nt=nt/10;}
13
            if(co==0)
14
               i++;
15
            n++;}
16
        printf("%d",--n);
17
        return 0;}
```

	Input	Expected	Got	
~	34	33344	33344	~