Stack'em Up

Program:

```cpp
#include <bits/stdc++.h>
using namespace std;

int shuff[100][53], card[53];

void change(int n) {
    static int tmp[53], i;
    for(i = 1; i <= 52; i++)
        tmp[i] = card[shuff[n][i]];
    for(i = 1; i <= 52; i++)
        card[i] = tmp[i];
}
void print() {
    static char num[][10] = {"Ace", "2", "3", "4", "5", "6", "7", "8", "9", "10",
 "Jack", "Queen", "King"};
    static char suit[][10] = {"Clubs", "Diamonds", "Hearts", "Spades"};
    static int i;
    for(i = 1; i <= 52; i++) {
        printf("%s of %s\n", num[card[i]%13], suit[(card[i]-1)/13]);
    }
}
int main()
{
    int t, n;
    int i, j, k;
    char line[50];
    scanf("%d", &t);
    while(t--)
    {
        scanf("%d", &n);
        for(k = 1; k <= n; k++)
        {
            for(i = 1; i <= 52; i++)
            {
                scanf("%d", &shuff[k][i]);  // for 2,1   2: [1][1]     1: [1][2]
            }
        }
        for(i = 1; i <= 52; i++)
            card[i] = i;
        gets(line);
```

```
        while(gets(line)) {
            if(line[0] == '\0') break;
            sscanf(line, "%d", &n);
            change(n);
        }
        print();
        if(t)
            puts("");
    }
    return 0;
}
```

Output:

```
1

2
2 1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 52 51
52 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 1
1
2

King of Spades
2 of Clubs
4 of Clubs
5 of Clubs
6 of Clubs
7 of Clubs
8 of Clubs
9 of Clubs
10 of Clubs
Jack of Clubs
Queen of Clubs
King of Clubs
Ace of Clubs
2 of Diamonds
3 of Diamonds
4 of Diamonds
5 of Diamonds
6 of Diamonds
7 of Diamonds
```

```
8 of Diamonds
9 of Diamonds
10 of Diamonds
Jack of Diamonds
Queen of Diamonds
King of Diamonds
Ace of Diamonds
2 of Hearts
3 of Hearts
4 of Hearts
5 of Hearts
6 of Hearts
7 of Hearts
8 of Hearts
9 of Hearts
10 of Hearts
Jack of Hearts
Queen of Hearts
King of Hearts
Ace of Hearts
2 of Spades
3 of Spades
4 of Spades
5 of Spades
6 of Spades
7 of Spades
8 of Spades
9 of Spades
10 of Spades
Jack of Spades
Queen of Spades
Ace of Spades
3 of Clubs
```