EEL 2880 Homework – Shuffle & Print a Deck

Write a program that will create a deck of cards, initialize values and properties for cards, shuffle, and print out the deck. <mark>Make sure the last line in your screen shot shows the date for review. See line 53 below.</mark>

The program outline listed on the web site for the Cards presentation is to be used as the specification for code to be written.

Additionally, the code below is given as a start for the main function of the program. The remaining functions for this assignment will be written as the homework assignment. The content of those functions is specified in the Cards presentation.

Turn in the following: a screen shot of the program output (including output from line 53) and the listing of your code.

```
1     #include <stdio.h>
2     #include <stdlib.h>
3     #include <time.h>
4
5     #define NCARDS 52
6     #define NPROPS 2
7
8     #define NSUITS 4
9     #define NFACES 13
10
11
12    // card text values using array of pointers to preinitialized constant text strings
13        char* suit[]={"hearts","spades","clubs","diamonds"};
14
15        char* face[]={"blank","ace","two","three","four","five","six","seven","eight","nine",
16                      "ten","jack","queen","king"};
17
18    // function prototypes used for manipulating cards
19        void PrintCard(int deck[NCARDS][NPROPS], int i);
20        void InitDeck(int deck[NCARDS][NPROPS]);
21        void SwapCards(int deck[NCARDS][NPROPS], int src, int dest);
22        void ShuffleDeck(int deck[NCARDS][NPROPS]);
23        int GetPlayValue(int deck[NCARDS][NPROPS], int i);
24
25    int main()
26    {
27
28        //deck of cards
29        //  face, suite, card value
30        int deck[NCARDS][NPROPS];
31        time_t rawtime=time(NULL);
32        int i;
33
34        srand(time(NULL));
35        // init the deck
36        // loop on the chards
37        InitDeck(deck);
38        for (i=0; i<NCARDS; i++)
39        {
40            PrintCard(deck,i);
41        }
42
43        ShuffleDeck(deck);
44
45
46
47        // print the deck
48        puts("The shuffled deck is:");
49        for (i=0; i<NCARDS; i++)
50        {
51            PrintCard(deck,i);
52        }
53        printf("Printed on %s", ctime(&rawtime));
54        system("PAUSE");
55
56        return 0;
57    }
58
59
```