

- 指標陣列 (array of pointer)

```
const char *suit[ 4 ] = { "Hearts", "Diamonds", "Clubs", "Spades" };
```

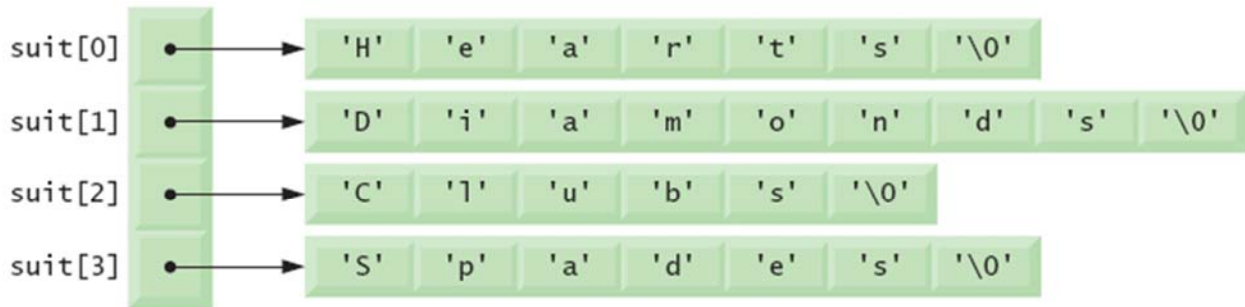
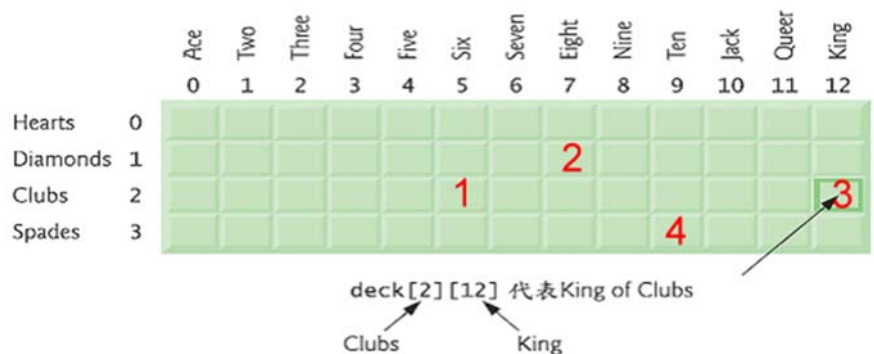


圖 7.22 suit 陣列的圖形表示

- 模擬發牌程式-指標陣列 (array of pointer)
 - 首先設定deck[4][13]初始值都是0，尚未設定順序
 - int deck[4][13]={0};
 - 設定deck[4][13]出牌順序
 - shuffle(deck);
 - 檢查deck[4][13]出牌順序，由1到52列印花色和大小
 - deal(deck);



- 模擬發牌程式-指標陣列 (array of pointer)

```

1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <time.h>
4
5 void shuffle(int wDeck[][13]);
6 void deal(const int wDeck[][13], const char *wFace[],
7           const char *wSuit[]);
8
9 int main(void)
10 {
11     const char *suit[4] = {"Hearts", "Diamonds", "Clubs", "Spades"};
12
13     const char *face[13] =
14         {"Ace", "Deuce", "Three", "Four",
15          "Five", "Six", "Seven", "Eight",
16          "Nine", "Ten", "Jack", "Queen", "King"};
17
18     int deck[4][13] = {0};
19
20     srand(time(0));
21
22     shuffle(deck);
23     deal(deck, face, suit);
24     system("pause");
25     return 0;
26 }

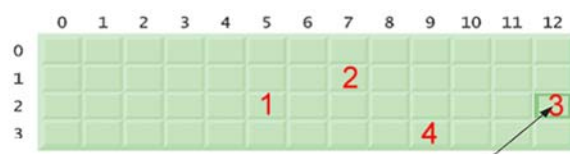
```

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- 模擬發牌程式-設定deck[4][13]出牌順序
 - while (wDeck[row][column] != 0;) //代表尚未給定順序牌號
 - wDeck[row][column] = card; //給定順序牌號,由小到大

- wDeck[row][column] = 1;
-
- wDeck[row][column] = 52;



```

27
28 void shuffle(int wDeck[][13])
29 {
30     int row;
31     int column;
32     int card;
33
34     for (card=1; card<=52; card++)
35     {
36         do
37         {
38             row = rand() % 4;
39             column = rand() % 13;
40             } while(wDeck[row][column] != 0);
41
42             wDeck[row][column] = card;
43         }
44     }

```

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- 模擬發牌程式-檢查deck[4][13]出牌順序，由1到52列印花色和大小

```

45
46 void deal(const int wDeck[][13], const char *wFace[],
47           const char *wSuit[])
48 {
49     int card;
50     int row;
51     int column;
52
53     for (card=1; card<=52; card++)
54     {
55         for (row=0; row<=3; row++)
56         {
57             for (column=0; column<=12; column++)
58             {
59                 if (wDeck[row][column] == card)
60                 {
61                     printf("%5s of %-8s%c", wFace[column], wSuit[row],
62                           card % 2 == 0 ? '\n' : '\t' );
63                 }
64             }
65         }
66     }
67 }

```

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- 模擬發牌程式

```

C:\Users\Andy\Desktop\ch3-100\Debug\ch3-100.exe
Six of Spades      Eight of Diamonds
Seven of Hearts    Four of Spades
Ace of Clubs       Three of Spades
Seven of Spades    King of Spades
Ten of Diamonds    Three of Hearts
Ace of Diamonds    Nine of Hearts
Ace of Spades      Ace of Hearts
Four of Clubs      Deuce of Diamonds
Seven of Clubs     Nine of Clubs
Four of Diamonds   Six of Diamonds
Deuce of Clubs     Five of Hearts
Six of Clubs       Three of Clubs
King of Clubs      King of Diamonds
Five of Clubs      Eight of Spades
Nine of Diamonds   Jack of Clubs
Ten of Hearts      Jack of Hearts
Five of Diamonds   Three of Diamonds
Queen of Spades    King of Hearts
Seven of Diamonds  Nine of Spades
Six of Hearts      Jack of Spades
Jack of Diamonds   Eight of Clubs
Queen of Diamonds  Ten of Clubs
Queen of Clubs     Deuce of Spades
Deuce of Hearts    Eight of Hearts
請按任意鍵繼續 . . .

```

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