

```
//Team Members: Michael Hannigan
```

```
#include <iostream>
```

```
#include <ctime>
```

```
#include <cstdlib>
```

```
#include <string>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    const int NUMBER_OF_CARDS = 52;
```

```
    int deck[NUMBER_OF_CARDS];
```

```
    string suits[] = {"Spades", "Hearts", "Diamonds", "Clubs"};
```

```
    string ranks[] = {"Ace", "2", "3", "4", "5", "6", "7", "8", "9",  
    "10", "Jack", "Queen", "King"};
```

```
    // Initialize cards
```

```
    for (int i = 0; i < NUMBER_OF_CARDS; i++)  
        deck[i] = i;
```

```
    // use a for loop to shuffle. I recommend using an index randomly. You can use your own  
    algorithm to
```

```
    //shuffle the cards.
```

```
    // your code to shuffle the cards;  
    int deckSize = sizeof(deck)/sizeof(deck[0]);
```

```
srand(time(0));  
for(int i = 0; i<NUMBER_OF_CARDS; i++){  
    int shuffleNum = rand()%NUMBER_OF_CARDS;  
    deck[i] = deck[shuffleNum];  
}
```

// Display the first four cards

```
for(int i = 0; i<4; i++){  
    int rankNum = deck[i] % 13;  
    string rank = ranks[rankNum];  
  
    int suitNum = deck[i]/13;  
    string suit = suits[suitNum];  
  
    cout<<rank<< " of " << suit << endl;  
}
```

```
}
```