

# Arrays and Cards

## Objectives

Use a deck of playing cards to learn basic array functions

Use a deck of playing cards to learn basic string functions

## Assignment

Download and unzip the cards.zip file. It contains a folder called card\_images containing 52 playing cards images.

Open up the folder and take note of the names for the images: aces are 01, jacks are 11, queens 12 and kings 13. Also notice that each suit is represented by the first letter of the file name. For instance d02.png is the 2 of diamonds.

You will work with this deck to learn some basic array functions.

Start by creating a file name cards\_array.php. This file and the card\_images folder should both be located inside the cards folder. cards\_array.php should include an HTML5 template and inside the body tag place your PHP code. Copy the code snippet below into your file. This code will create an array named \$deck[] that you will use for this assignment.

```
$deck = array (
    'c01.png', 'c02.png', 'c03.png', 'c04.png', 'c05.png', 'c06.png', 'c07.png',
    'c08.png', 'c09.png', 'c10.png', 'c11.png', 'c12.png', 'c13.png', 'd01.png',
    'd02.png', 'd03.png', 'd04.png', 'd05.png', 'd06.png', 'd07.png', 'd08.png',
    'd09.png', 'd10.png', 'd11.png', 'd12.png', 'd13.png', 'h01.png', 'h02.png',
    'h03.png', 'h04.png', 'h05.png', 'h06.png', 'h07.png', 'h08.png', 'h09.png',
    'h10.png', 'h11.png', 'h12.png', 'h13.png', 's01.png', 's02.png', 's03.png',
    's04.png', 's05.png', 's06.png', 's07.png', 's08.png', 's09.png', 's10.png',
    's11.png', 's12.png', 's13.png'
);
// you can remove print_r(). This just shows that it worked.
print_r($deck);
```

Save the file and run it locally. It should display the array contents.

Display the deck using a foreach loop. Remember that you are displaying HTML so you will need to use the echo statement and the <img src tag.

Create a break with an <hr /> tag to make seeing each of the sections easier

Next sort the cards by using `asort()`

Create a break with an `<hr />` tag

sort the cards by key -- look this up in the PHP manual

Create a break with an `<hr />` tag

Display only the spades suit. Hint, the `substr()` function can help you out.

Create a break with an `<hr />` tag

Shuffle the deck and display it. The cards will reshuffle each time the page is refreshed.

Create a break with an `<hr />` tag

Randomly deal five cards from the deck using a loop. The deal will happen each time the page is refreshed.

Create a break with an `<hr />` tag

Use a `foreach` loop and display only the cards where the file name is an odd number. Check out the modulus operator for this one.

Create a break with an `<hr />` tag

Think of an array function you would like to use on the deck of cards and write out what problem you are trying to solve then write the code for it so it displays the cards. Next post your problem (without including the solution) to the forum for this module.

Create a break with an `<hr />` tag

Choose one of the forum posts and solve the coding problem. Be sure to include the problem description with your code.

## Submitting Your Work

Zip the folder and save it as `cards.zip`. Upload your files to your host.