14 March 2019

Question for Pandas Introduction

# Create an np.array of 15 random 64int entities

# Convert the above np.array to an array with a shape of (3,5)

# What is the number of dimensions of the above np.array

# Change the type of the np.array to int32

# Name 2 differences between np.arange and range.

# Create a Series of 10 random integer between 10 and 20 inclusive. Give the array a name. Give the array and index of matching upper case characters.

# Create a dictionary of 4 authors and their best-selling books. Make up the authors and title if necessary. Use the author’s names as the index. Use this to make a Series.

# Print just the values of the above array.

# Print the indexes of the above Series as an np.array

# Print the index of the above Series as a list.

# What is the type of the second element of the array?

# Create an array with values of 1, 2,3,4,5 and index of ‘a’, ‘b’, ‘c’, ‘d’, ’e’, ’f’. Yes, there are 5 value and 6 index elements.

# Use label indexing to extract the 3rd element of the Series.

# Using position indexing extract the 3rd element of the Series.

# Slice out the 2nd and 4th index of the Series

# Filter the Series to return values that are larger than the mean

# Given the following 2 series subtract one from the other

**s3 = Series(randint(1,11, 5), index=list("DFACB"))**

**s4 = Series(randint(1,11,5), index=list("ACBED"))**

# What happens if you try to divide one series by the other?

# Use two different techniques for creating the following DataFrame

**one two three four five**

**a 0 NaN 2 3.0 4.0**

**b a b c NaN e**

**c 1 2 3 4.0 5.0**