

Exercise 6

1.	Create a data frame called <code>df</code> from the following tabular data dictionary that has these index labels: ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j']. <table><tr><th></th><th>Animal</th><th>Age</th><th>Priority</th><th>Visits</th></tr><tr><td>a</td><td>cat</td><td>2.5</td><td>yes</td><td>1</td></tr><tr><td>b</td><td>cat</td><td>3.0</td><td>yes</td><td>3</td></tr><tr><td>c</td><td>snake</td><td>0.5</td><td>no</td><td>2</td></tr><tr><td>d</td><td>dog</td><td>NaN</td><td>yes</td><td>3</td></tr><tr><td>e</td><td>dog</td><td>5.0</td><td>no</td><td>2</td></tr><tr><td>f</td><td>cat</td><td>2.0</td><td>no</td><td>3</td></tr><tr><td>g</td><td>snake</td><td>4.5</td><td>no</td><td>1</td></tr><tr><td>h</td><td>cat</td><td>NaN</td><td>yes</td><td>1</td></tr><tr><td>i</td><td>dog</td><td>7.0</td><td>no</td><td>2</td></tr><tr><td>j</td><td>dog</td><td>3.0</td><td>no</td><td>1</td></tr></table>		Animal	Age	Priority	Visits	a	cat	2.5	yes	1	b	cat	3.0	yes	3	c	snake	0.5	no	2	d	dog	NaN	yes	3	e	dog	5.0	no	2	f	cat	2.0	no	3	g	snake	4.5	no	1	h	cat	NaN	yes	1	i	dog	7.0	no	2	j	dog	3.0	no	1
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2.	Display a summary of the data frame's basic information. You can use <code>df.info()</code> and <code>df.describe()</code> to get a full description of your data set.																																																							
3.	Return the first three rows of the data frame <code>df</code> . Listing 6-42 shows the use of <code>df.iloc[:3]</code> and <code>df.head(3)</code> to retrieve the first <code>n</code> rows of the data frame.																																																							
4.	Select just the animal and age columns from the data frame <code>df</code> . The Python data frame <code>loc()</code> method is used to retrieve the specific pattern <code>df.loc[:, ['Animal', 'Age']]</code> . In addition, an array form retrieval can be used too with <code>df[['Animal', 'Age']]</code> .																																																							
5.	Count the visit priority per animal.																																																							
6.	Find the mean of the animals' ages.																																																							
7.	Display a summary of the data set.																																																							