1
00:00:04,600 --> 00:00:06,733
Hi. I'm Jimmy.

2
00:00:06,733 --> 00:00:08,300
I live here in Pittsburgh.

3
00:00:08,300 --> 00:00:10,233
They're trying to get my brother Donny.

4
00:00:10,233 --> 00:00:12,100
To move back home.

5
00:00:12,100 --> 00:00:15,133
He's currently
living in New York City's Central Park.

6
00:00:16,633 --> 00:00:18,266
My mom is really worried

7
00:00:18,266 --> 00:00:21,066
about how crowded
and dangerous life in the big city is.

8
00:00:21,600 --> 00:00:23,533
And she asked me

9
00:00:23,966 --> 00:00:25,633
to use my data skills

10
00:00:25,633 --> 00:00:28,633
to help convince him
to move back to the old family tree.

11
00:00:29,433 --> 00:00:32,700
And while I think it's nice that he's
been able to strike out on his own

12
00:00:33,133 --> 00:00:35,466
and make a life for himself
in the big city.

13
00:00:35,466 --> 00:00:39,533
I know firsthand how controlling
my mom can be and does it out of love.

14
00:00:39,533 --> 00:00:40,533
Of course.

15
00:00:40,766 --> 00:00:43,700
I'd also like to show my brother how often

16
00:00:43,933 --> 00:00:47,500
squirrels in Central Park
are chased by dogs and kids

17
00:00:47,500 --> 00:00:51,166
and other things to make the case
the park can be dangerous environments

18
00:00:51,700 --> 00:00:55,166
and these interactions can be captured
in the data that we're going to look at.

19
00:00:55,666 --> 00:00:58,333
And I also want to show how often
and how much

20
00:00:58,333 --> 00:01:01,000
time squirrels in Central Park
spend looking for food,

21
00:01:01,766 --> 00:01:04,966
because it takes a long time
to find nuts in the big city like that.

22
00:01:06,766 --> 00:01:10,133
And I want to give
my mom some talking points in a phone call

23
00:01:10,133 --> 00:01:12,900
that she can use
when she talks to him next time.

24
00:01:13,266 --> 00:01:17,000
So you'll see how we do that
in the rest of the video.

25
00:01:17,866 --> 00:01:20,233
Give me a second I'll share my screen

26
00:01:26,000 --> 00:01:27,066
Our first step in this work

27
00:01:27,066 --> 00:01:31,800
is going to be navigating
to the New York City Open data portal.

28
00:01:31,800 --> 00:01:33,466
From the browser search.

29
00:01:33,466 --> 00:01:35,233
Please bear with me.

30
00:01:35,233 --> 00:01:37,600
It's a little tough for us squirrels
to type given our claws

31
00:01:41,000 --> 00:01:44,233
So I'm going to click on the Open
Data link,

32
00:01:44,233 --> 00:01:46,333

and this will take us to the Open
Data portal.

33
00:01:47,033 --> 00:01:47,833
So I'm going to take a minute

34
00:01:47,833 --> 00:01:50,866
to talk about open data websites
or portals like this one.

35
00:01:51,400 --> 00:01:54,866
Data portals are repositories
where you can search for

36
00:01:54,866 --> 00:01:58,966
and find links to many different datasets,
maps and other resources

37
00:01:58,966 --> 00:02:01,933
that provide a helpful context
about the data you're working with.

38
00:02:02,533 --> 00:02:05,233
In other words, it might help you
to think of open data portals

39
00:02:05,233 --> 00:02:08,400
as containers for data about communities.

40
00:02:09,000 --> 00:02:12,500
Many places post and share open data
through portals like this one.

41
00:02:13,000 --> 00:02:16,366
You could see them typing the word
squirrel to search for squirrel data.

42
00:02:16,900 --> 00:02:20,566

You'll see that I gotten a list
of pretty interesting datasets here.

43
00:02:21,400 --> 00:02:24,700
The first one I'm going to take a look at
is the squirrel census data

44
00:02:24,700 --> 00:02:28,766
that you could see fur color maps
and all sorts of other information

45
00:02:29,200 --> 00:02:31,833
is contained
in this New York City's Open Data portal.

46
00:02:33,233 --> 00:02:35,266
And I'm going to click on this top link
here.

47
00:02:35,266 --> 00:02:36,533
Bear with me

48
00:02:37,700 --> 00:02:39,833
and you'll see that I have a page.

49
00:02:39,933 --> 00:02:42,300
We kind of call these data set landing
pages.

50
00:02:43,200 --> 00:02:44,333
You'll see this is the page

51
00:02:44,333 --> 00:02:47,733
for the New York City
Central Park Squirrel Census in 2018.

52
00:02:48,300 --> 00:02:51,300
There's descriptive information

on this page about the dataset.

53
00:02:52,133 --> 00:02:56,000
You can scroll down a little further
and you can see when this dataset

54
00:02:56,000 --> 00:03:00,700
was updated,
when it was created, who created it

55
00:03:01,400 --> 00:03:03,733
and how many records
there might be and views

56
00:03:05,733 --> 00:03:08,733
You can also learn more about

57
00:03:09,300 --> 00:03:10,366
other things associated

58
00:03:10,366 --> 00:03:14,433
with this data, like if there are helpful
data guides or other resources

59
00:03:14,433 --> 00:03:17,700
for you that provide additional context,
because context is really important

60
00:03:18,133 --> 00:03:22,666
And I mentioned rows in this dataset,
there should be about 3023 rows.

61
00:03:23,400 --> 00:03:26,066
Scrolling down further, you can see that
there's a data dictionary,

62
00:03:26,066 --> 00:03:30,200
which is a definition of all the columns

that you'll find in a dataset.

63
00:03:30,266 --> 00:03:32,166
This is helpful to have,

64
00:03:32,166 --> 00:03:35,400
and you'll scroll down
and see lots of detailed information here.

65
00:03:36,466 --> 00:03:39,766
Some that I'm going to call out

66
00:03:39,900 --> 00:03:41,600
related to this project

67
00:03:41,600 --> 00:03:45,900
involves the foraging
because we want to see how many squirrels

68
00:03:45,900 --> 00:03:48,466
are looking for food
and how often that takes place.

69
00:03:48,900 --> 00:03:51,866
And the second one,
we want to look at our other interactions,

70
00:03:52,400 --> 00:03:56,966
which are kind of observational data
recorded by data collectors.

71
00:03:57,600 --> 00:04:00,766
Scrolling down a little further, still,
you'll see a preview of the table

72
00:04:00,766 --> 00:04:02,500
and scrolling across.

73
00:04:02,500 --> 00:04:04,633
You'll notice lots of different fields.

74
00:04:05,166 --> 00:04:08,100
You can look and see
like what the foraging column looks like.

75
00:04:08,100 --> 00:04:10,333
Lots of true false responses there.

76
00:04:11,000 --> 00:04:13,900
And then the other column that
we're interested in, other interactions,

77
00:04:14,366 --> 00:04:16,533
not a lot of data, but what looks like

78
00:04:18,100 --> 00:04:20,833
it's entered
by the data collectors themselves.

79
00:04:20,866 --> 00:04:22,200
And so it's

80
00:04:23,433 --> 00:04:24,800
looking pretty good.

81
00:04:24,800 --> 00:04:26,366
And we're going to scroll to the top here.

82
00:04:26,366 --> 00:04:29,033
You can see
we're going to download this dataset now

83
00:04:29,866 --> 00:04:31,333
and open it up in a spreadsheet.

84
00:04:31,333 --> 00:04:35,666
I'm going to use the CSV file
format here, CSB file formats or comma

85
00:04:35,666 --> 00:04:38,966
separated variables, CSP for short.

86
00:04:39,700 --> 00:04:42,166
And one of the reasons
that we really like CSPs

87
00:04:42,166 --> 00:04:46,400
is that they're really compatible
with a lot of other software packages.

88
00:04:47,566 --> 00:04:50,366
Lots of different software can read this.

89
00:04:50,633 --> 00:04:54,500
Lots of spreadsheets can open
this It's an open file format

90
00:04:54,500 --> 00:04:58,566
means it's not associated
with any one proprietary software.

91
00:04:58,700 --> 00:05:01,866
And so we really like that
when we're working with data.

92
00:05:02,066 --> 00:05:04,466
And so you'll see clicking on the CSB link

93
00:05:05,233 --> 00:05:07,566
will open up a link in the bottom corner.

94
00:05:08,333 --> 00:05:11,066

And we can then take a look at the data
in a spreadsheet

95
00:05:11,800 --> 00:05:14,033
and you'll notice that,

96
00:05:14,233 --> 00:05:19,533
you know, I'm checking to see
if we have 3023 rows in this dataset.

97
00:05:19,533 --> 00:05:23,766
Like we thought from the open data
portal scrolling down to the bottom.

98
00:05:24,166 --> 00:05:27,200
We have 3024,
so there's one row for the call matter.

99
00:05:27,200 --> 00:05:28,533
So that's right.

100
00:05:28,533 --> 00:05:30,700
And then going back up to the top,

101
00:05:30,700 --> 00:05:33,933
we can go across and take a look at all
the different columns that we want to see.

102
00:05:34,400 --> 00:05:36,433
So you can see that we have the

103
00:05:38,266 --> 00:05:39,766
foraging column that we're looking at

104
00:05:39,766 --> 00:05:42,666
and we'll just make that a little larger,
lots of true false

105
00:05:44,200 --> 00:05:45,466
readings in that.

106
00:05:45,466 --> 00:05:50,066
And the second column
is the other interactions.

107
00:05:50,066 --> 00:05:53,666
And you could see that not a lot of data,
but what looks like it's in there

108
00:05:53,666 --> 00:05:57,866
is entered by humans and as part of that
data collection process.

109
00:05:58,766 --> 00:06:02,200
And so we're excited

110
00:06:02,200 --> 00:06:05,033
to turn this into pivot tables

111
00:06:07,466 --> 00:06:08,466
Pivot tables

112
00:06:08,466 --> 00:06:12,400
can be a great tool for producing quick
summaries of information in a spreadsheet.

113
00:06:12,900 --> 00:06:14,800
Here on the board, I don't mind

114
00:06:14,800 --> 00:06:19,200
just a few of the important operators
that you can use with pivot tables.

115
00:06:19,866 --> 00:06:22,033
You can do counts of rows.

116
00:06:22,033 --> 00:06:24,533
You can total things in a column
using a sum

117
00:06:25,133 --> 00:06:27,666
you can calculate averages
and even medians.

118
00:06:27,666 --> 00:06:31,166
Although Excel doesn't let you do
EDI and very easily,

119
00:06:31,566 --> 00:06:34,033
you have to use Google sheets for that.

120
00:06:34,033 --> 00:06:36,033
You can calculate standard deviations

121
00:06:36,600 --> 00:06:40,233
and max and min of different columns,
the highest and lowest values.

122
00:06:40,733 --> 00:06:42,900
So you can see pivot
tables are a great way

123
00:06:43,300 --> 00:06:46,566
to really cut through your data quickly
and get meaning from it.

124
00:06:50,533 --> 00:06:53,566
Now, before I get started, I'm
going to just take another

125
00:06:53,566 --> 00:06:57,433
look at my data and I'm going to make sure
that I know which columns in many use.

126
00:06:57,800 --> 00:07:00,066
I'm going to use the foraging column

127
00:07:00,066 --> 00:07:03,666
that's going to tell us how
often squirrels were observed foraging.

128
00:07:03,966 --> 00:07:07,566
I'm also going to look at the other
interactions column and I'm going to just

129
00:07:07,566 --> 00:07:12,466
double check and see
how far in terms of columns my data goes.

130
00:07:12,466 --> 00:07:14,733
So it goes through the data

131
00:07:15,400 --> 00:07:18,466
to start the process
of making this pivot table.

132
00:07:19,000 --> 00:07:24,533
You go to the insert menu and then check
on pivot table and something will happen.

133
00:07:24,566 --> 00:07:27,000
You'll get a dialog box
showing up on your screen

134
00:07:27,800 --> 00:07:31,300
you'll be able to take a look
at the table range that you have,

135
00:07:31,766 --> 00:07:34,533
usually
by clicking on a cell in your table.

136
00:07:35,066 --> 00:07:36,366
It will just give you a default.

137
00:07:36,366 --> 00:07:39,266
I'm just going
to verify that this goes from

138
00:07:40,300 --> 00:07:41,500
column A

139
00:07:41,500 --> 00:07:45,133
to column 80, 300, 3024

140
00:07:45,133 --> 00:07:48,233
rows and that's fine.

141
00:07:48,233 --> 00:07:50,333
I'm going to run this
into a new worksheet.

142
00:07:50,366 --> 00:07:53,866
Just stick with the default measure
and I'm going to click

143
00:07:53,866 --> 00:07:56,500
okay to create my pivot table.

144
00:07:57,666 --> 00:08:00,833
Doesn't look like a whole lot right
now, but just wait.

145
00:08:00,966 --> 00:08:03,833
The magic is going to happen here
in a second.

146
00:08:03,833 --> 00:08:06,266

I'm going to scroll
through on the right panel.

147
00:08:06,600 --> 00:08:11,200
That just opened up
and look at my fields in the table.

148
00:08:11,900 --> 00:08:14,933
I'm going to scroll
down to the foraging field

149
00:08:14,933 --> 00:08:17,200
and I'm going to drag that down

150
00:08:17,200 --> 00:08:19,600
and make it the header for my row.

151
00:08:21,600 --> 00:08:25,466
And you'll see here on the screen
it shows up and I'm going to make it

152
00:08:25,466 --> 00:08:29,333
a little bit bigger because I'm
an old squirrel and I have trouble seeing

153
00:08:31,400 --> 00:08:31,933
and you'll see

154
00:08:31,933 --> 00:08:34,500
that we have two options
here, false and true.

155
00:08:35,066 --> 00:08:39,366
This really shows that this file
has a controlled vocabulary, meaning that

156
00:08:39,600 --> 00:08:42,966
people had only a limited set of things

that they could enter

157
00:08:43,500 --> 00:08:46,633
when they were entering the data.

158
00:08:46,733 --> 00:08:49,700
Our next step in the process
is to actually define

159
00:08:49,700 --> 00:08:52,633
how we're going to do this
and so we're going to drag

160
00:08:53,133 --> 00:08:57,566
the table ID into the Values column,
and you'll see that this showed up here.

161
00:08:57,933 --> 00:09:00,866
And this had filled in account
of the number of observation

162
00:09:01,166 --> 00:09:03,966
so the little dropdown arrow next to that

163
00:09:04,766 --> 00:09:07,566
item that we drag down into the values
will give you that option.

164
00:09:07,933 --> 00:09:09,233
We're going to stick with the count

165
00:09:09,233 --> 00:09:11,666
and we're going to see that this
this here on screen tells us

166
00:09:12,133 --> 00:09:16,200
how many observations had a squirrel
foraging versus not foraging.

167
00:09:17,233 --> 00:09:17,733
And if we wanted

168
00:09:17,733 --> 00:09:20,433
to create a percentage of that,
we could do that pretty easily.

169
00:09:20,800 --> 00:09:23,633
And the pivot table itself
using a formula.

170
00:09:24,566 --> 00:09:27,433
And here we're just going to divide
the number of true observations

171
00:09:27,866 --> 00:09:31,533
by the number of total observations

172
00:09:31,533 --> 00:09:33,866
Just going to do a little bit
of formatting here.

173
00:09:33,866 --> 00:09:37,766
And so that's how easy it was for us
to create a summary table in the data set.

174
00:09:39,566 --> 00:09:43,333
So about half the time
squirrels in Central Park were foraging.

175
00:09:43,933 --> 00:09:46,066
But we can also answer another question.

176
00:09:46,066 --> 00:09:49,866
Like, for example,
where were these squirrels foraging?

177
00:09:49,866 --> 00:09:53,600
Were they in a safe place up in the tree
or were they at the ground level?

178
00:09:53,800 --> 00:09:58,466
And we can drag the location field
and put that as a column.

179
00:09:58,500 --> 00:10:00,433
You'll see how our
table changes in a second.

180
00:10:02,000 --> 00:10:05,233
Oh, it's just asking
if I want to overwrite that percentage.

181
00:10:05,833 --> 00:10:07,433
And yes, I did.

182
00:10:07,533 --> 00:10:11,266
And you can see now in the table,
it's changed.

183
00:10:11,266 --> 00:10:15,533
So now we have information
about where the squirrels were foraging.

184
00:10:15,533 --> 00:10:19,233
And you can see most of the observations
were happening in the ground plate

185
00:10:19,233 --> 00:10:20,633
or at the ground level.

186
00:10:20,633 --> 00:10:22,500
If you have questions about this,
you could take a look

187
00:10:22,500 --> 00:10:25,500
at the data dictionary on the open
data portal.

188
00:10:26,600 --> 00:10:28,466
I'm hungry.

189
00:10:28,700 --> 00:10:31,333
It's time for a snack food

190
00:10:49,100 --> 00:10:51,266
that was pretty good.

191
00:10:51,733 --> 00:10:55,166
Now, the sorry.

192
00:10:56,466 --> 00:10:57,266
Let's get started.

193
00:10:57,266 --> 00:10:59,133
Back with the lesson

194
00:11:00,866 --> 00:11:03,333
I just showed you how to make a basic
pivot table.

195
00:11:03,900 --> 00:11:07,000
Now I'll show you
how to use the filter feature

196
00:11:07,466 --> 00:11:12,566
to prepare a count of the number
of squirrels being threatened by a dog

197
00:11:12,966 --> 00:11:16,033
or some other scary things
at the time of the observation.

198
00:11:17,033 --> 00:11:20,933
And uh uh

199
00:11:28,133 --> 00:11:31,433
I just wanted to start to create a second
pivot table.

200
00:11:31,433 --> 00:11:34,433
A couple of ways that I can do that.

201
00:11:34,433 --> 00:11:37,933
I want to take a look at the other
interactions view so I can remove

202
00:11:39,100 --> 00:11:40,966
some of the options

203
00:11:40,966 --> 00:11:44,866
by, um, checking them
or dragging them back into the row.

204
00:11:44,866 --> 00:11:46,700
Listed my pivot table.

205
00:11:46,700 --> 00:11:47,766
But the other thing you can do is,

206
00:11:47,766 --> 00:11:50,266
and this is what I'm going to do here
is to start over from scratch.

207
00:11:50,666 --> 00:11:53,066
Open up the data table

208
00:11:53,066 --> 00:11:56,700
Go to the insert menu

and click on the pivot table.

209
00:11:56,700 --> 00:11:59,066
And I'm going to create a second
pivot a table.

210
00:11:59,066 --> 00:12:02,800
You can have multiple pivot tables open
in a spreadsheet And here I'll just keep

211
00:12:02,800 --> 00:12:06,566
the default settings for my data range
and created in the new worksheet.

212
00:12:06,800 --> 00:12:09,900
And so that'll get us
started to take a look

213
00:12:09,900 --> 00:12:13,133
at the kind of interactions that happened
with squirrels in Central Park.

214
00:12:13,900 --> 00:12:16,400
And so here I'm going to drag
the other interactions column

215
00:12:17,000 --> 00:12:19,700
into our rows box

216
00:12:19,700 --> 00:12:22,633
and you'll see a big long
list of interactions show up there.

217
00:12:23,033 --> 00:12:25,833
One thing that you'll notice
is it's pretty small,

218
00:12:25,833 --> 00:12:29,033

but I'm going to fix that,
make it a little bit larger

219
00:12:30,000 --> 00:12:32,600
so we can take a look at that.

220
00:12:32,666 --> 00:12:34,166
So here we go.

221
00:12:35,033 --> 00:12:35,766
There we go.

222
00:12:35,766 --> 00:12:37,166
Much better.

223
00:12:37,666 --> 00:12:40,433
And clicking in the pivot table
open, that opens up

224
00:12:40,966 --> 00:12:43,466
the right panel menu.

225
00:12:43,466 --> 00:12:47,466
You can see
there are a long list of interactions.

226
00:12:47,500 --> 00:12:49,666
This is not a controlled vocabulary.

227
00:12:50,166 --> 00:12:52,066
This is a free text entry.

228
00:12:52,066 --> 00:12:55,066
And so you could see letting anybody enter
anything

229
00:12:55,066 --> 00:12:58,633

they want into a field
can get really messy sometimes here.

230
00:12:58,800 --> 00:12:59,666
It's okay.

231
00:12:59,666 --> 00:13:02,833
But the data is not all that easily
structured for analysis.

232
00:13:03,366 --> 00:13:05,766
And so we're going to try to tackle
some of those challenges here.

233
00:13:06,466 --> 00:13:09,300
And you could see
lots of different categories.

234
00:13:09,300 --> 00:13:11,466
And I'm going to just use this
filter menu.

235
00:13:11,466 --> 00:13:15,833
So I'm dragging the option next to the row
label and just start to select it

236
00:13:15,833 --> 00:13:19,766
on select fields that have to do with dogs
using this filter

237
00:13:19,833 --> 00:13:22,666
So scrolling down through the list, it's
going to take a little while

238
00:13:23,166 --> 00:13:27,400
to make sense of this clicking on things
that involved dogs as I see them.

239

00:13:27,866 --> 00:13:29,966
But I'm not perfect
and I'm going to make mistakes

240
00:13:30,066 --> 00:13:32,500
and I'm just going to click a few
just to show you how this works.

241
00:13:33,966 --> 00:13:36,633
And so hitting okay will filter this list.

242
00:13:36,666 --> 00:13:41,100
So now I am only showing some that
I checked that definitely involve dogs.

243
00:13:42,633 --> 00:13:44,500
And one thing I didn't do yet was I didn't

244
00:13:44,500 --> 00:13:47,133
drag a field down that we're going to use
in our calculation.

245
00:13:47,700 --> 00:13:49,933
So we don't see counts next to this
data yet.

246
00:13:49,933 --> 00:13:51,000
I'm dragging that now.

247
00:13:51,000 --> 00:13:53,366
You can see those show up here.

248
00:13:53,366 --> 00:13:56,200
You could see a couple of actual entries

249
00:13:56,200 --> 00:13:57,633
with multiple

250
00:13:59,500 --> 00:14:00,633
of the same type of entries.

251
00:14:00,633 --> 00:14:03,466
So Dog is in there twice

252
00:14:04,633 --> 00:14:06,633
And so I'm just going to stick with that

253
00:14:06,633 --> 00:14:09,966
default setting of counts

254
00:14:09,966 --> 00:14:12,733
and you can see how this works.

255
00:14:12,733 --> 00:14:14,100
But my list isn't very big.

256
00:14:14,100 --> 00:14:15,633
So I'm going to go back into this menu

257
00:14:15,633 --> 00:14:17,600
and I'm going to show you another way
to do this.

258
00:14:17,600 --> 00:14:19,866
You can use the search
feature in a pivot table

259
00:14:21,266 --> 00:14:22,766
to start to make sense of your data.

260
00:14:22,766 --> 00:14:27,066
So I'm going to just type
the word dog into the search box.

261

00:14:27,066 --> 00:14:29,933
And it should give me anything

262
00:14:29,933 --> 00:14:32,266
that has an entry
that has the word dog in it.

263
00:14:33,400 --> 00:14:36,600
I'm going to add that to my existing
selection and you can see how that works.

264
00:14:37,400 --> 00:14:39,333
So you can see lots of entries involved.

265
00:14:39,333 --> 00:14:42,533
Dogs and people have entered
different things in different ways.

266
00:14:42,966 --> 00:14:45,600
Running from a dog, running from a human
with a dog.

267
00:14:47,200 --> 00:14:49,266
Lots of different ways the status entered.

268
00:14:49,700 --> 00:14:52,466
So pivot tables
help you to make sense of it.

269
00:14:52,466 --> 00:14:54,566
In a pretty quick way.

270
00:14:54,566 --> 00:14:57,700
And so some other entries in here
as I was looking at this table earlier,

271
00:14:57,700 --> 00:14:59,500
preparing for this.

272
00:14:59,600 --> 00:15:03,600
Kids were poking squirrels with sticks
and I want to include those here.

273
00:15:04,000 --> 00:15:07,433
There was a man with a pit bull, and that
entry didn't include the word dog.

274
00:15:07,433 --> 00:15:09,233
So that didn't show up here.

275
00:15:09,233 --> 00:15:14,266
And dogs being chased by lots of different
things, kids and lawnmowers.

276
00:15:14,300 --> 00:15:17,000
And I just want to enter that here, too,
and add that to my list.

277
00:15:17,033 --> 00:15:18,500
And so you can see how this works.

278
00:15:20,066 --> 00:15:22,666
Using the search features a nice way
to get through this pretty quickly.

279
00:15:22,666 --> 00:15:26,000
But sometimes in unstructured data,
you'll find messiness.

280
00:15:27,333 --> 00:15:29,100
You can also sort in pivot tables.

281
00:15:29,100 --> 00:15:32,733
So if I wanted to see
the one type of entry that is in there

282
00:15:32,733 --> 00:15:36,833
most frequently,
I can use that right click sort

283
00:15:36,833 --> 00:15:40,166
and display it from largest to smallest
like I did here.

284
00:15:41,266 --> 00:15:44,133
And so this is the kind of information
that I want to definitely share

285
00:15:44,133 --> 00:15:48,533
with my mom so she can let Donny know
about all the different types of dangerous

286
00:15:48,533 --> 00:15:51,400
things that happen in Central Park
that he just might not be aware of.

287
00:15:54,900 --> 00:15:55,200
Pivot

288
00:15:55,200 --> 00:15:57,933
tables are a quick way
to explore your data.

289
00:15:58,600 --> 00:16:02,166
They work with a wide variety
of tabular data formats

290
00:16:02,766 --> 00:16:06,866
Any data that works with a spreadsheet
can work with the pivot table.

291
00:16:07,766 --> 00:16:10,433
Many people have experience
working with spreadsheets,

292
00:16:11,066 --> 00:16:15,400
making pivot tables at all
that many can use to explore underlying

293
00:16:15,400 --> 00:16:20,000
data structures and create summary
statistics for data in their spreadsheet.

294
00:16:21,433 --> 00:16:22,366
Thank you

295
00:16:22,366 --> 00:16:25,700
and I hope you enjoyed this video.

296
00:16:52,766 --> 00:16:53,700
On the board,

297
00:16:53,700 --> 00:16:56,400
you can see lots of different
pivot table operators.

298
00:16:56,900 --> 00:16:59,366
You can do things like account

299
00:17:00,233 --> 00:17:00,566
type.