

# Tableau Lab Answer Sheet – Independent Activity

## Part 1

Use this answer sheet to answer the questions with the **red squares** from the Tableau Lab (see lab handout for the entire set of instructions). You can include partial screenshots of displays/visualizations if the entire display is too big. We just want to know that you were able to generate the answer/transformation.

### Question 6: Which movies were about dragons?

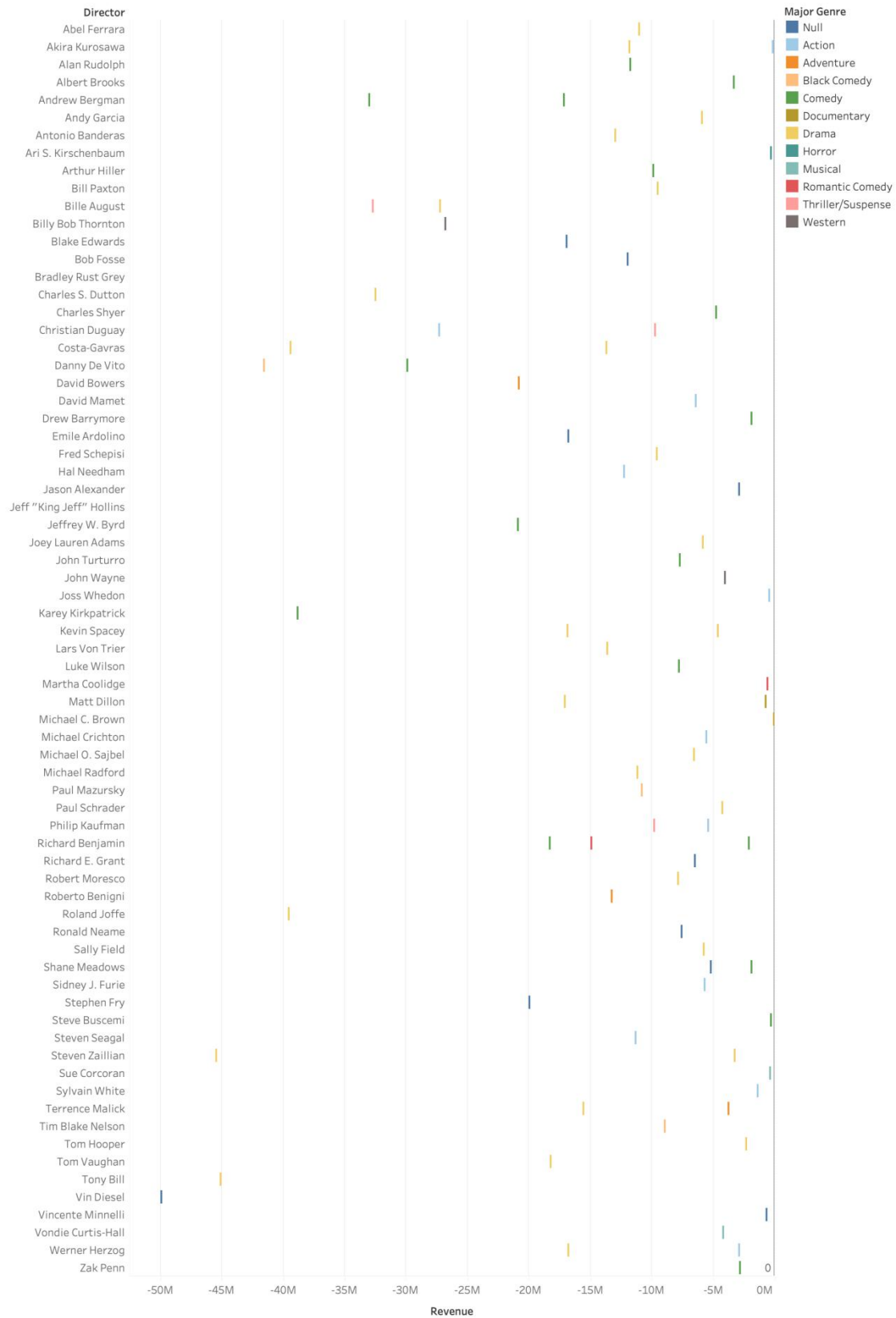
Abc movies.csv Title	# movies.csv US Gross	# movies.csv Worldwide Gross	=# Calculation Revenue	# movies.csv US DVD Sales	# movies.csv Productio
Three Kingdoms: Resurr...	0	22,139,590	2,139,590	null	
Dragonheart	51,364,680	104,364,680	47,364,680	null	
Dragonslayer	6,000,000	6,000,000	-12,000,000	null	
Pete's Dragon	36,000,000	36,000,000	26,000,000	null	
Dragonfly	30,063,805	30,063,805	-29,936,195	null	
Crouching Tiger, Hidden ...	128,067,808	213,200,000	198,200,000	null	
Dungeons & Dragons 2: ...	0	909,822	-14,090,178	null	
Dungeons and Dragons	15,185,241	33,771,965	-1,228,035	null	
George and the Dragon	0	0	-32,000,000	null	
How to Train Your Dragon	217,581,231	491,581,231	326,581,231	null	
Kiss of the Dragon	36,833,473	36,833,473	11,833,473	null	
The Mummy: Tomb of th...	102,491,776	397,912,118	222,912,118	43,147,886	
Red Dragon	92,955,420	206,455,420	128,455,420	null	

**Ans: The movies above were about dragons.**

**Question 9: Are there directors who have never directed a profitable movie? Who are they?**

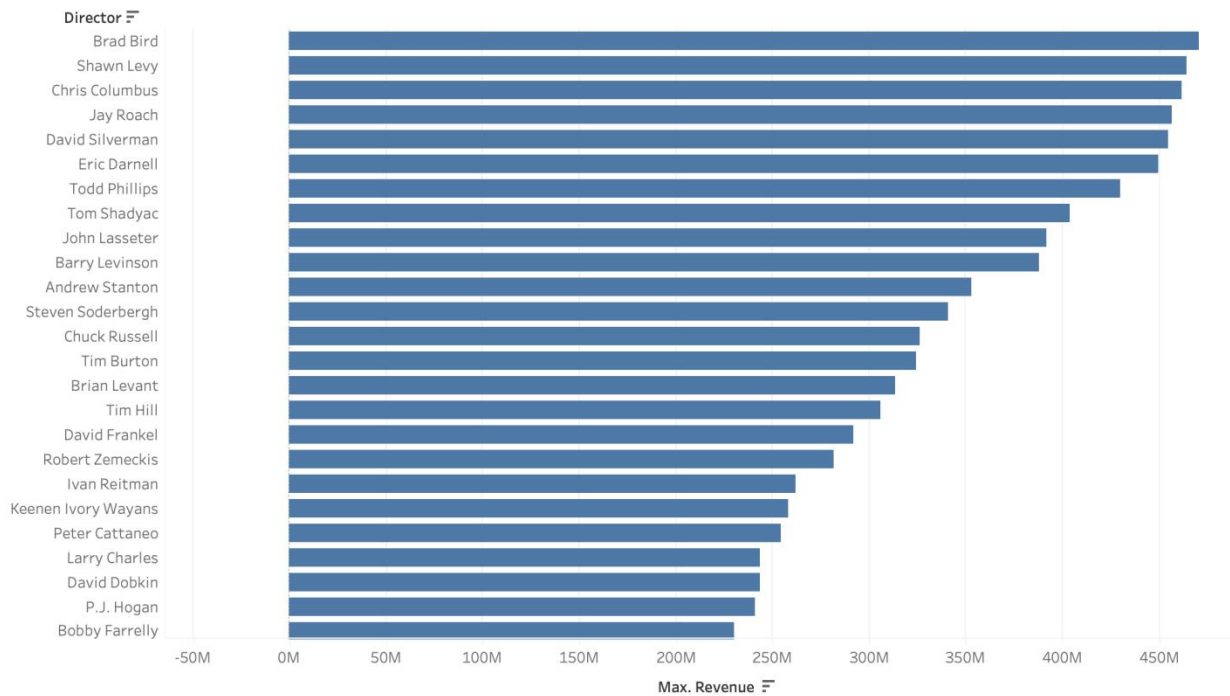
**Ans: Yes, there are directors who have never directed a profitable movie. The worksheet below shows all of them.**

## Revenue as Dimension (Non-profit)



### Question 11: Which director has directed the most profitable Comedy movie?

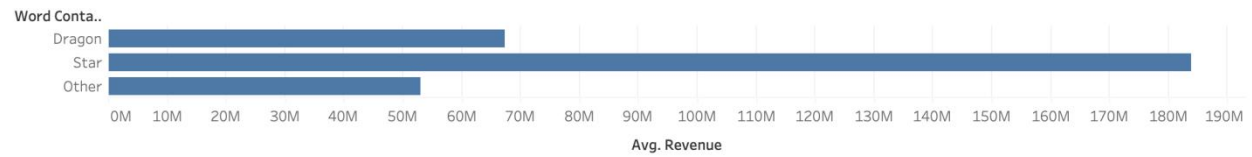
Max of Revenue by Director



**Ans: Brad Bird has directed the most profitable comedy movie.**

**Question 12: (bonus question): Do movies that contain the word “star” have higher average revenue than movies with “dragon” in the title?**

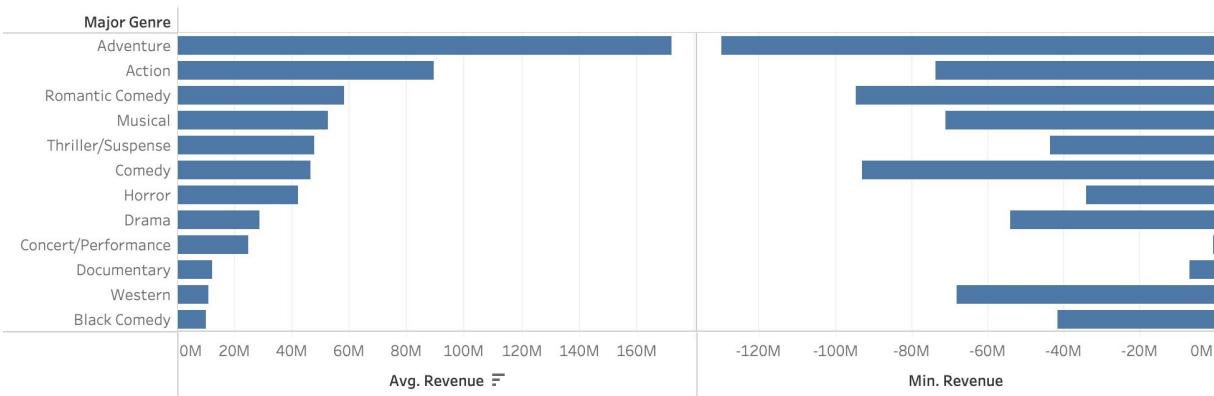
Average of Revenue by Word Contain



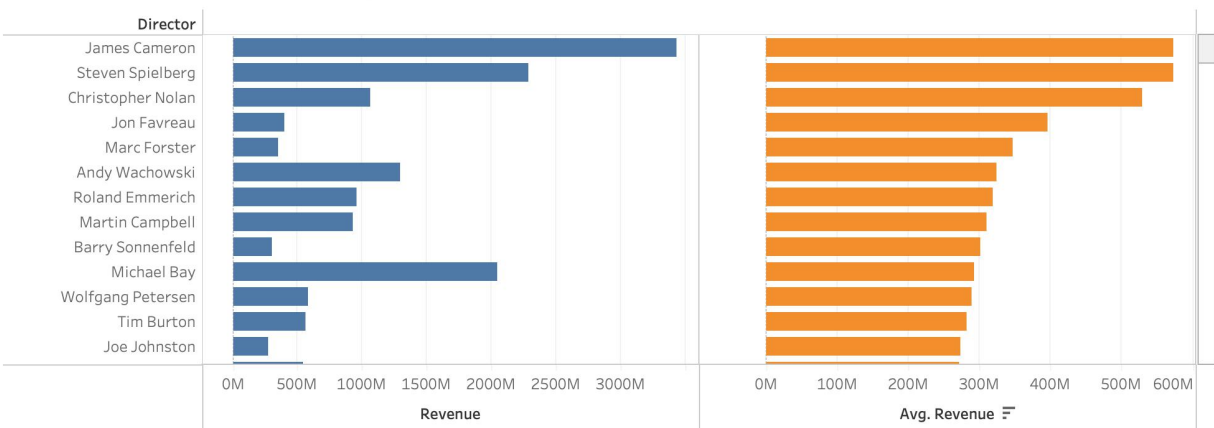
**Ans: Yes, movies that contain the word “star” have higher average revenue than movies with “dragon” in the title.**

## Question 15: Is it better to invest in action movies or comedies? Which director would you invest in?

Average and Minimum of Revenue by Major Genre



Sum and Average of Revenue by Director



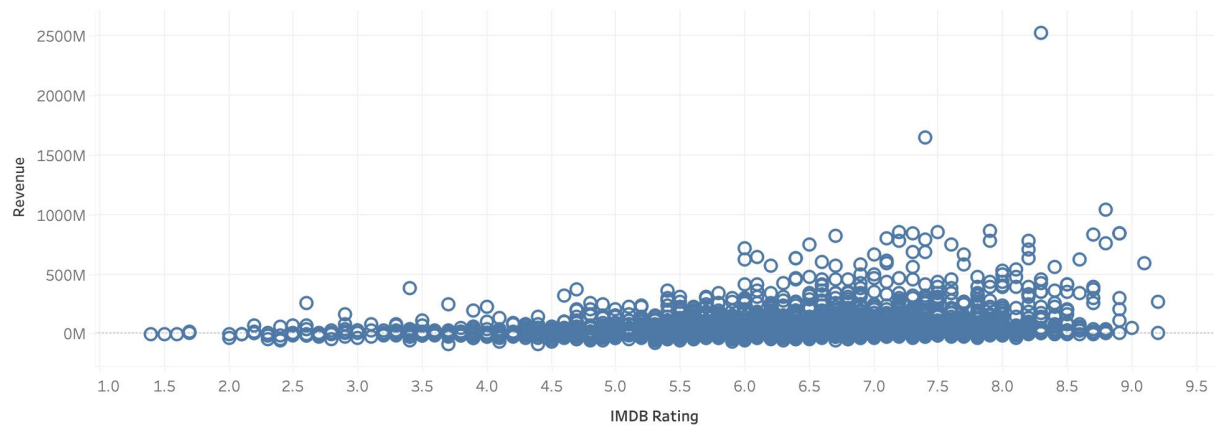
**Ans:** I create a Average and Minimum of Revenue visualization by a filter of major genre. I combine this worksheet with the Sum and Average of Revenue by Director in a dashboard.

**It is better to invest in action movies, as action movies has higher average revenue and higher minimum revenue than comedies.**

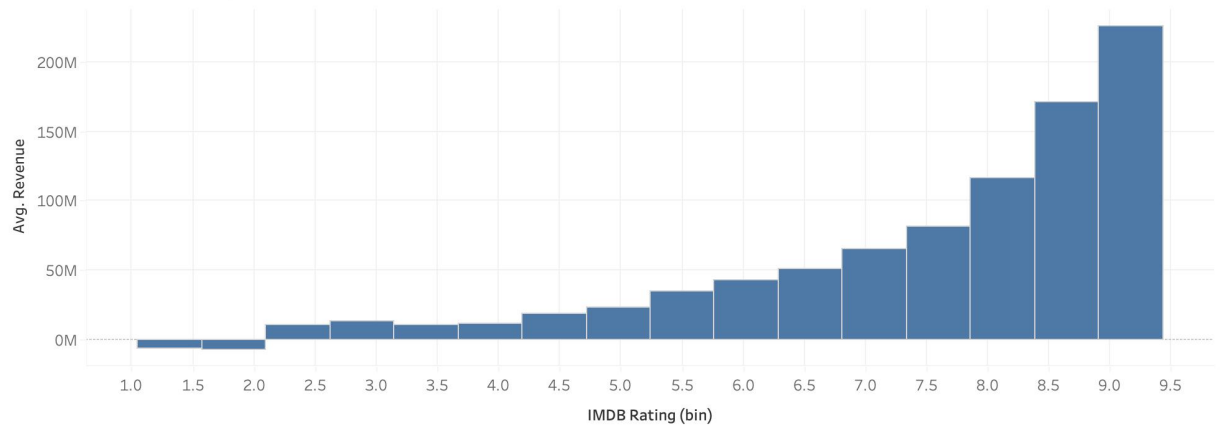
**I would invest in James Cameron, as among all the action movie directors, he has both the highest sum of revenue and the highest average of revenue.**

**Question 16: What's the relationship between IMDB ratings and revenue? Are highly-rated movies more profitable?**

Scatter Plot between IMDB Rating and Revenue



Average Revenue by Bins of IMDB Rating

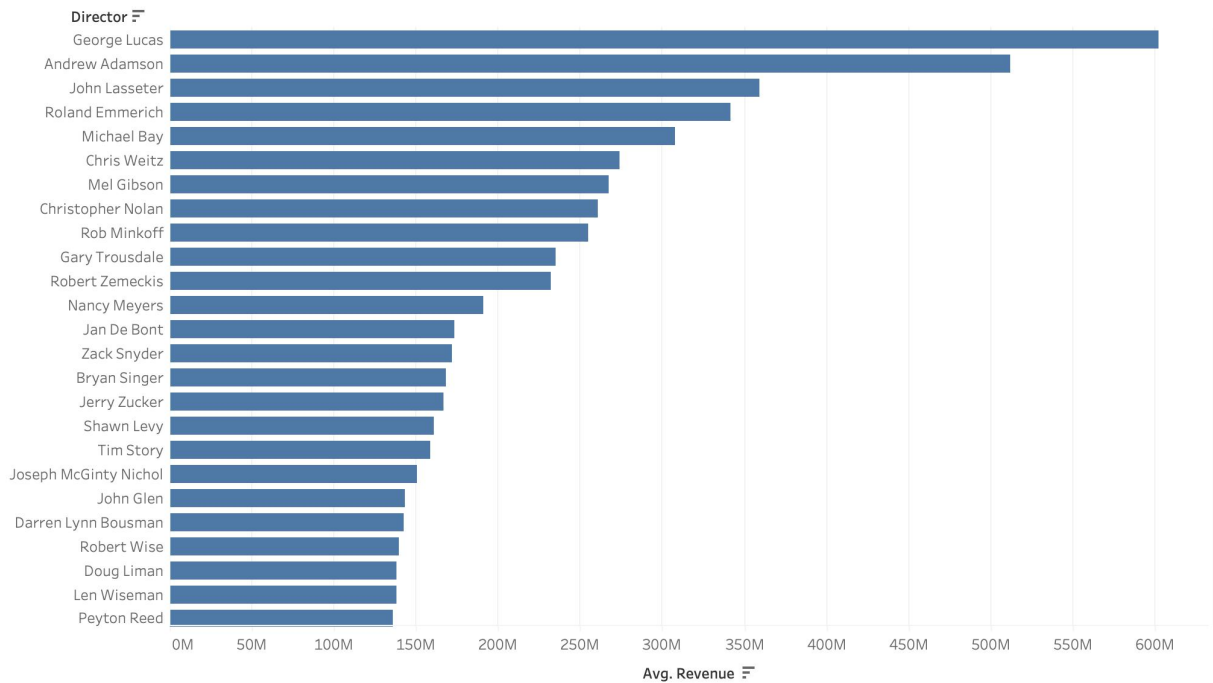


**Ans: I create a scatter plot between IMDB Rating and Revenue, and also Average Revenue by Bins of IMDB Rating.**

**From the visualizations, I conclude that, there is no guarantee that every high-rated movie brings in more revenue, but on average, high-rated movies bring in more revenue overall.**

## Question 18: Who would you invest in?

Best Director to Invest



**Ans: I would invest in George Lucas.**

**I implement two filters: First, I select only the directors that has never directed non-profitable movies (i.e.  $\text{Min}([\text{Revenue}]) > 0$ ), which is less risky; Second, I select only the directors who has directed more than 2 movies (i.e.  $\text{COUNT}([\text{Title}]) > 2$ ), who are more experienced.**

**I then sorted these directors in descending order based on average revenue. The top one is George Lucas, the very director I choose.**