

# Does Movie Runtime Impact IMDb Ratings?

Thomas Farrar

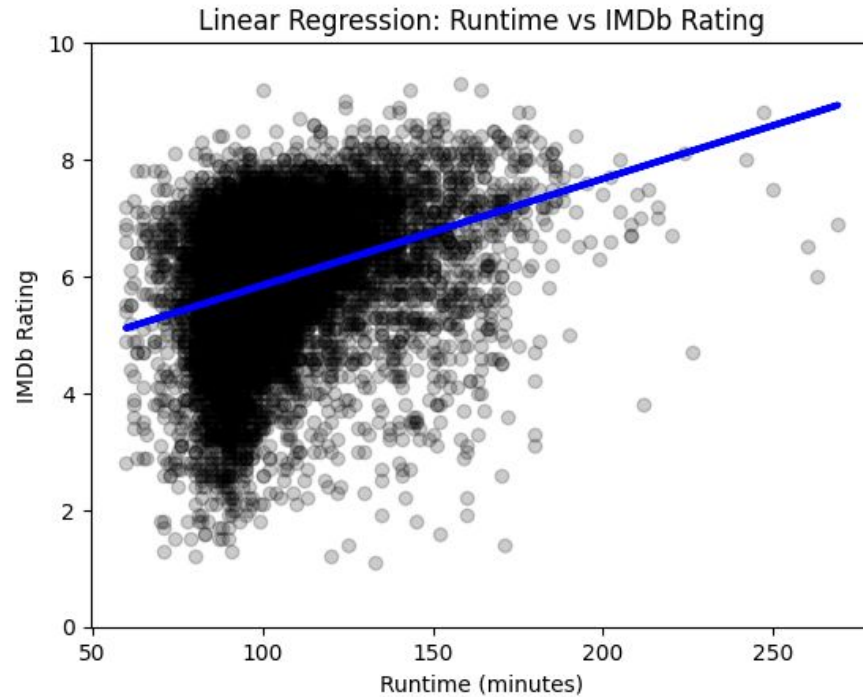
# Dataset

| movie title             | Run Time                 | Rating | User Rating | Genres                          | Overview  | Plot Keyword                                      | Director           | Top 5 Casts                                       | Writer             | year  |
|-------------------------|--------------------------|--------|-------------|---------------------------------|---|---|--------------------|---|--------------------|-------|
| Let Him Have It         | 1 hour 55 minutes        | 7.2    | 3.6K        | ['Crime', 'Drama', 'History']   | This drama reveals the controversial postwar 1... | ['courtroom drama', 'legal drama', 'timeframe ... | Peter Medak        | ['Robert Wade', 'Tom Courtenay', 'Christopher ... | Neal Purvis        | -1991 |
| The Policeman's Lineage | 1 hour 59 minutes        | 6.1    | 427         | ['Crime', 'Drama']              | Parasite's Woo-sik Choi stars as one of the tw... | []  | Kyu-maen Lee       | ['Cho Jin-woong', 'Choi Woo-sik', 'Hee-soon Pa... | Bae Young-ik       | -2022 |
| Painter                 | not-released             | 5      | 238         | ['Drama', 'Thriller']           | A wealthy art collector's obsession with a you... | ['jealousy', 'painter as artist', 'one word ti... | Cory Wexler Grant  | ['Betsy Randle', 'Eric Ladin', 'Anastasia Ledd... | Cory Wexler Grant  | -2020 |
| Kill the Irishman       | \$12,000,000 (estimated) | 7      | 49K         | ['Biography', 'Crime', 'Drama'] | The true story of Danny Greene, a tough Irish ... | ['shot in the back of one's head', 'assassinat... | Jonathan Hensleigh | ['Jeremy Walters', 'Rick Porrello', 'Ray Steve... | Jonathan Hensleigh | -2011 |
| Indrajit                | not-released             | 8.1    | 23          | ['Action']                      | Biswajit is a renowned barrister. He has two y... | []  | Anjan Choudhury    | ['Ranjit Mallick', 'Anil Chatterjee', 'Anup Ku... | Anjan Choudhury    | -1992 |
| Tiptoes                 | not-released             | 4.3    | 5.1K        | ['Comedy', 'Drama', 'Romance']  | The story of a peculiar love triangle involvin... | ['fraternal twins', 'artist', 'reference to go... | Matthew Bright     | ['Gary Oldman', 'Peter Dinklage', 'Kate Beckin... | Matthew Bright     | -2002 |
| And Then Came Lola      | not-released             | 3.9    | 1.7K        | ['Comedy', 'Drama', 'Romance']  | In this sexy lesbian romp, Lola will lose her ... | ['timeloop', 'photographer', 'f rated', 'sex t... | Ellen Seidler      | ['Ellen Seidler', 'Megan Siler', 'Ashleigh S...   | Megan Siler        | -2009 |

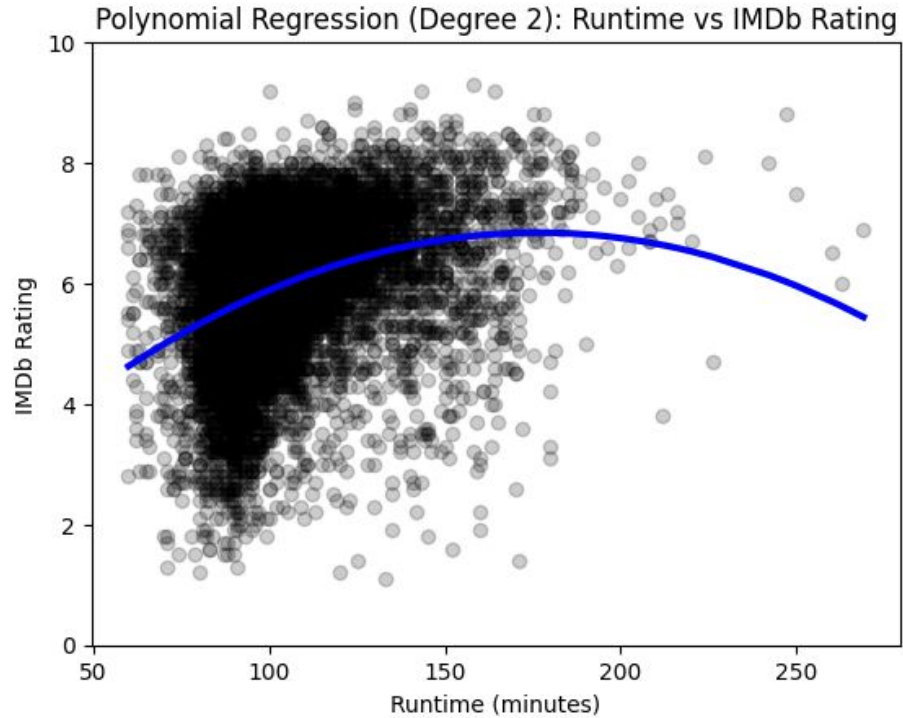
# Preprocessing

| movie title              | Run Time | Rating | User Rating | Genres                           | Director             | Top 5 Casts  | Writer                | year |
|--------------------------|----------|--------|-------------|----------------------------------|----------------------|--|-----------------------|------|
| Cleaner                  | 88       | 6.1    | 42000       | ['Crime', 'Mystery', 'Thriller'] | Renny Harlin         | ['Samuel L. Jackson', 'Ed Harris', 'Eva Mendes...] | Matthew Aldrich       | 2007 |
| Ville-Marie              | 101      | 5.8    | 813         | ['Drama']                        | Guy Édoin            | ['Guy Édoin', 'Monica Bellucci', 'Pascale Buss...] | Jean-Simon DesRochers | 2015 |
| The Prophet's Game       | 106      | 4.8    | 1100        | ['Crime', 'Drama', 'Thriller']   | David Worth          | ['Dennis Hopper', 'Stephanie Zimbalist', 'Robe...] | Carol Chrest          | 2000 |
| To the Shores of Tripoli | 86       | 6.0    | 862         | ['Drama', 'Romance', 'War']      | H. Bruce Humberstone | ['Steve Fisher', 'John Payne', 'Maureen O'Hara...] | Lamar Trotti          | 1942 |
| Can Feda                 | 109      | 5.4    | 1500        | ['Action', 'War']                | Çagatay Tosun        | ['Burak Özçivit', 'Kerem Bürsin', 'Melike Yalo...] | Zafer Külünk          | 2018 |

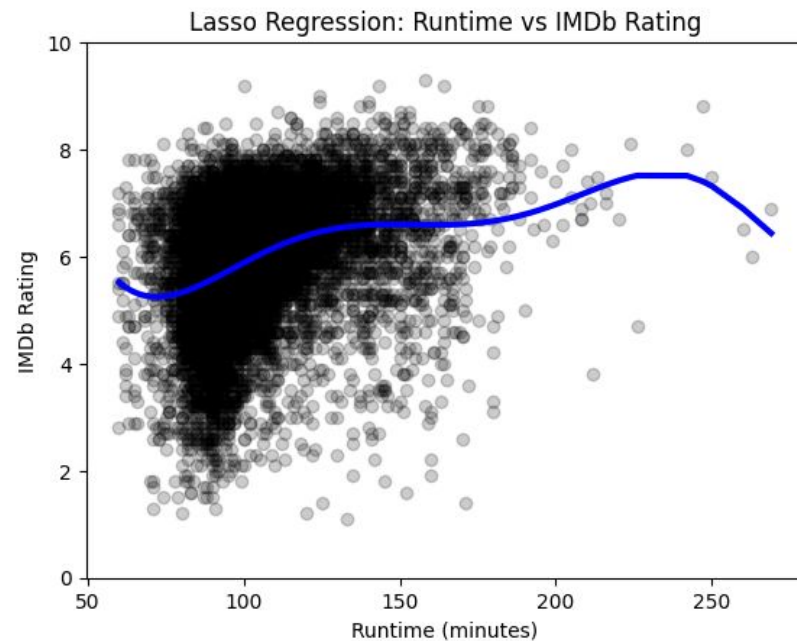
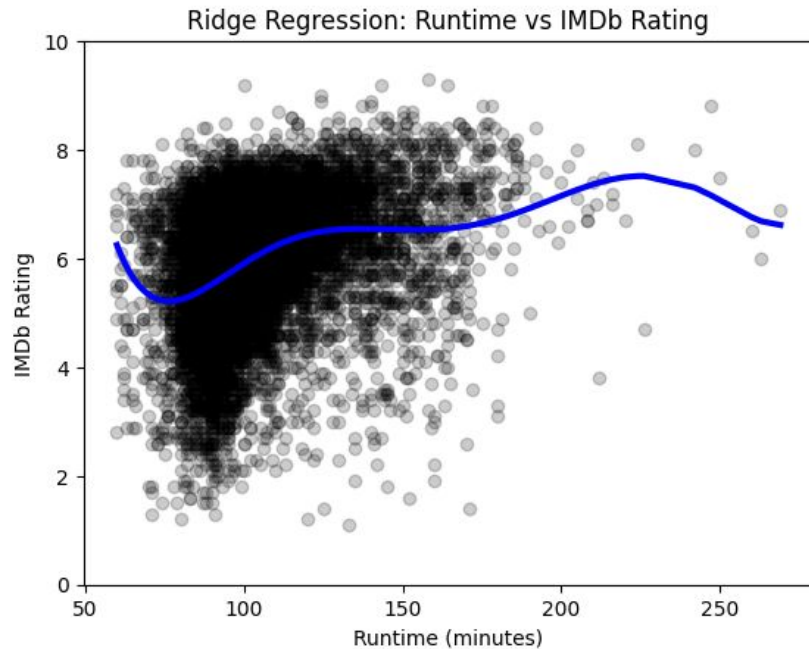
# Linear Regression



# Polynomial Regression



# Ridge and Lasso Regression



# Conclusion

