

python_redis_Part2

May 6, 2025

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[9]: import redis
from collections import defaultdict

# 1. Connect to Redis
rd = redis.Redis(host='redis', port=6379, decode_responses=True)

# 2. Count actors with last name starting with "P"
def Question1():
    actor_keys = rd.keys("actor:*")
    count = 0
    for key in actor_keys:
        l_name = rd.hget(key, "last_name")
        if l_name and l_name.startswith("P"):
            count += 1
    return count

# 3. Movies released after 2010 with more than 100,000 votes
def Question2():
    movie_keys = rd.keys("movie:*")
    results = []
    for key in movie_keys:
        r_year = rd.hget(key, "release_year")
        votes = rd.hget(key, "votes")
        if r_year and votes:
            if int(r_year) > 2010 and int(votes) > 100000:
                results.append(rd.hget(key, "title"))
    return results

# 4. Create top_movies_by_genre:<genre>
def Question3():
    genre_dict = defaultdict(list)
    movie_keys = rd.keys("movie:*")

    for key in movie_keys:
        genre = rd.hget(key, "genre")
        rating = rd.hget(key, "rating")
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        title = rd.hget(key, "title")
        if genre and rating:
            genre_dict[genre].append((title, float(rating)))

    for genre, movies in genre_dict.items():
        top_movie = max(movies, key=lambda x: x[1])
        rd.hset(f"top_movies_by_genre:{genre}", mapping={
            "title": top_movie[0],
            "rating": top_movie[1]
        })

# Main execution
if __name__ == "__main__":
    print("Question1:", Question1())
    print("Question2:", Question2())
    for movie in Question2():
        print("*", movie)

    print("Question3:done")
    Question3()
    print("Done! Good Wiem")

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Question1: 64

Question2: ['Jurassic World', 'The Maze Runner', 'Boyhood', 'The Interview', 'Everest', 'The Imitation Game', 'Spider-Man: Homecoming', 'The Revenant', 'Chappie', 'Birdman or (The Unexpected Virtue of Ignorance)', 'Zootopia', 'Minions', 'The Judge', 'Star Wars: Episode VII - The Force Awakens', 'Noah', 'Ex Machina', 'Ted 2', 'Predestination', 'The Theory of Everything', '10 Cloverfield Lane', 'X-Men: Apocalypse', 'Iron Man 3', 'Ant-Man', 'Captain America: The Winter Soldier', 'Star Wars: Episode IX - The Rise of Skywalker', 'Need for Speed', 'The Amazing Spider-Man 2', 'Battle Los Angeles', 'Neighbors', 'The Hunger Games: Mockingjay - Part 1', 'Suicide Squad', 'Insurgent', 'Whiplash', 'Fury', 'Hercules', 'The Grand Budapest Hotel', 'Inside Out', 'Transcendence', 'Avengers: Age of Ultron', 'Divergent', 'It Follows', 'A Million Ways to Die in the West', 'Sin City: A Dame to Kill For', 'Last Vegas', 'Focus', 'Spotlight', 'American Sniper', 'The Fault in Our Stars', 'Kingsman: The Secret Service', 'Cinderella', 'Warcraft', 'Batman v Superman: Dawn of Justice', 'Steve Jobs', 'The Girl on the Train', 'Star Wars: Episode VIII - The Last Jedi', 'Creed', 'Southpaw', 'Maze Runner: The Scorch Trials', 'The Hunger Games: Mockingjay - Part 2', '22 Jump Street', 'The Drop', 'Jack Reacher: Never Go Back', 'John Wick', 'Sicario', 'Dawn of the Planet of the Apes', 'San Andreas', 'Spider-Man: Into the Spider-Verse', 'Terminator Genisys', 'Dracula Untold', 'Spider-Man: Far from Home', 'Unbroken', 'Spy', 'Maleficent', 'Interstellar', 'Gone Girl', 'Ghostbusters', 'The Equalizer', 'The Expendables 3', 'The Intern', 'Spectre', 'Transformers: Age of Extinction', 'Straight Outta Compton', 'Pitch Perfect 2', 'The Martian', 'Bridge of Spies', 'Black Mass', 'Fifty Shades of Grey', '1917', 'The Babadook', 'Deadpool', 'The Hobbit: The

Battle of the Five Armies', 'Teenage Mutant Ninja Turtles', 'Mad Max: Fury Road', 'Now You See Me 2', 'The Nice Guys', 'The Conjuring 2', 'The Lego Movie', 'Furious Seven', 'The Other Woman', 'Guardians of the Galaxy Vol. 2', 'Captain America: Civil War', 'Horrible Bosses 2', 'Mission: Impossible - Rogue Nation', 'Tomorrowland', 'Jack Ryan: Shadow Recruit', 'X-Men: Days of Future Past', 'Room', 'Edge of Tomorrow', 'Star Trek Beyond', 'Nightcrawler', 'Exodus: Gods and Kings', 'Big Hero 6', '300: Rise of an Empire', 'Guardians of the Galaxy', 'Fantastic Four', 'Jupiter Ascending', 'The Jungle Book', 'The Big Short', 'Non-Stop', 'The Hateful Eight']

- * Jurassic World
- * The Maze Runner
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- * The Imitation Game
- * Spider-Man: Homecoming
- * The Revenant
- * Chappie
- * Birdman or (The Unexpected Virtue of Ignorance)
- * Zootopia
- * Minions
- * The Judge
- * Star Wars: Episode VII - The Force Awakens
- * Noah
- * Ex Machina
- * Ted 2
- * Predestination
- * The Theory of Everything
- * 10 Cloverfield Lane
- * X-Men: Apocalypse
- * Iron Man 3
- * Ant-Man
- * Captain America: The Winter Soldier
- * Star Wars: Episode IX - The Rise of Skywalker
- * Need for Speed
- * The Amazing Spider-Man 2
- * Battle Los Angeles
- * Neighbors
- * The Hunger Games: Mockingjay - Part 1
- * Suicide Squad
- * Insurgent
- * Whiplash
- * Fury
- * Hercules
- * The Grand Budapest Hotel
- * Inside Out
- * Transcendence
- * Avengers: Age of Ultron

- * Divergent
- * It Follows
- * A Million Ways to Die in the West
- * Sin City: A Dame to Kill For
- * Last Vegas
- * Focus
- * Spotlight
- * American Sniper
- * The Fault in Our Stars
- * Kingsman: The Secret Service
- * Cinderella
- * Warcraft
- * Batman v Superman: Dawn of Justice
- * Steve Jobs
- * The Girl on the Train
- * Star Wars: Episode VIII - The Last Jedi
- * Creed
- * Southpaw
- * Maze Runner: The Scorch Trials
- * The Hunger Games: Mockingjay - Part 2
- * 22 Jump Street
- * The Drop
- * Jack Reacher: Never Go Back
- * John Wick
- * Sicario
- * Dawn of the Planet of the Apes
- * San Andreas
- * Spider-Man: Into the Spider-Verse
- * Terminator Genisys
- * Dracula Untold
- * Spider-Man: Far from Home
- * Unbroken
- * Spy
- * Maleficent
- * Interstellar
- * Gone Girl
- * Ghostbusters
- * The Equalizer
- * The Expendables 3
- * The Intern
- * Spectre
- * Transformers: Age of Extinction
- * Straight Outta Compton
- * Pitch Perfect 2
- * The Martian
- * Bridge of Spies
- * Black Mass
- * Fifty Shades of Grey

- * 1917
- * The Babadook
- * Deadpool
- * The Hobbit: The Battle of the Five Armies
- * Teenage Mutant Ninja Turtles
- * Mad Max: Fury Road
- * Now You See Me 2
- * The Nice Guys
- * The Conjuring 2
- * The Lego Movie
- * Furious Seven
- * The Other Woman
- * Guardians of the Galaxy Vol. 2
- * Captain America: Civil War
- * Horrible Bosses 2
- * Mission: Impossible - Rogue Nation
- * Tomorrowland
- * Jack Ryan: Shadow Recruit
- * X-Men: Days of Future Past
- * Room
- * Edge of Tomorrow
- * Star Trek Beyond
- * Nightcrawler
- * Exodus: Gods and Kings
- * Big Hero 6
- * 300: Rise of an Empire
- * Guardians of the Galaxy
- * Fantastic Four
- * Jupiter Ascending
- * The Jungle Book
- * The Big Short
- * Non-Stop
- * The Hateful Eight

Question3:done
Done! Good Wiem

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