

wiem_Notebook_Part1

May 6, 2025

```
[35]: !pip install redis
```

Requirement already satisfied: redis in /opt/conda/lib/python3.11/site-packages (6.0.0)

```
[36]: import redis
```

```
rd = redis.Redis(host='redis', port=6379, decode_responses=True)
```

```
[37]: rd.ping()
```

```
[37]: True
```

0.0.1 Q1: How many actors and movies are stored?

```
[46]: print(len(rd.keys("actor:*")))  
      print(len(rd.keys("movie:*")))
```

1324

922

0.0.2 Q2: List 5 actors born before 1980

```
[39]: actors = rd.keys("actor:*")  
      results = []  
  
      for key in actors:  
          date = rd.hget(key, "date_of_birth")  
          if date and int(date) < 1980:  
              f_name = rd.hget(key, "first_name")  
              l_name = rd.hget(key, "last_name")  
              results.append((f_name, l_name, date))  
          if len(results) == 5:  
              break  
  
      results
```

```
[39]: [('Nate', 'Parker', '1979'),
      ('Mark', 'Margolis', '1939'),
      ('Corey', 'Stoll', '1976'),
      ('Archie', 'Panjabi', '1972'),
      ('Kim', 'Director', '1974')]
```

0.0.3 Q3: Get genre and rating of “The Imitation Game”

```
[40]: movies = rd.keys("movie:*")
      for key in movies:
          title = rd.hget(key, "title")
          if title == "The Imitation Game":
              genre = rd.hget(key, "genre")
              rating = rd.hget(key, "rating")
              print(f"Genre: {genre}, Rating: {rating}")
              break
```

Genre: Biography, Rating: 8.5

0.0.4 Q4: Top 5 highest-rated movies

```
[41]: movies = rd.keys("movie:*")
      movie_ratings = []

      for key in movies:
          title = rd.hget(key, "title")
          rating = rd.hget(key, "rating")
          if rating:
              movie_ratings.append((title, float(rating)))

      top5 = sorted(movie_ratings, key=lambda x: x[1], reverse=True)[:5]
      top5
```

```
[41]: [('Boy 9', 9.4),
      ('Vegas (doc)', 9.4),
      ('The Shawshank Redemption', 9.3),
      ('Ween Live in Chicago', 9.2),
      ('Over Canada: An Aerial Adventure', 9.1)]
```

0.0.5 Q5: How many movies have rating > 7.5

```
[42]: count = 0
      for key in movies:
          rating = rd.hget(key, "rating")
          if rating and float(rating) > 7.5:
              count += 1
```

```
count
print(f"The are {count} movies have rating > 7.5")
```

The are 183 movies have rating > 7.5

Q6: Update rating of “The Imitation Game” to 8.5

```
[43]: for key in movies:
        if rd.hget(key, "title") == "The Imitation Game":
            rd.hset(key, "rating", 8.5)
            break
    print("the rating of The Imitation Game updated to 8.5")
```

rating of The Imitation Game updated to 8.5

0.0.6 Q7: Add actor “Zendaya”, born in 1996

```
[44]: new_id = len(rd.keys("actor:*)) + 1
    rd.hset(f"actor:{new_id}", mapping={"first_name": "Zendaya", "last_name": "",
    ↪ "date_of_birth": "1996"})

    print("actor:Zendaya, born in 1996 added")
```

actor:Zendaya, born in 1996 added

0.0.7 Q8: Delete movie “The room”

```
[45]: for key in movies:
        if rd.hget(key, "title") == "The Room":
            rd.delete(key)
            break
    print("The room movie deleted")
```

The room movie deleted