```
1
    # Prints all titles in CSV using csv.reader
 2
 3
    import csv
 5
    # Open CSV file
    with open("favorites.csv", "r") as file:
 6
 8
        # Create reader
        reader = csv.reader(file)
 9
10
11
        # Skip header row
        next(reader)
12
13
14
        # Iterate over CSV file, printing each title
        for row in reader:
15
            print(row[1])
16
```

```
# Prints all titles in CSV using csv.DictReader
 1
 2
    import csv
 3
 5
    # Open CSV file
    with open("favorites.csv", "r") as file:
 8
        # Create DictReader
        reader = csv.DictReader(file)
 9
10
11
        # Iterate over CSV file, printing each title
        for row in reader:
12
            print(row["title"])
13
```

```
# Prints unique titles in CSV, case sensitively
 1
 2
 3
    import csv
 4
    # For accumulating (and later sorting) titles
 5
    titles = set()
 6
    # Open CSV file
 8
    with open("favorites.csv", "r") as file:
 9
10
11
        # Create DictReader
12
        reader = csv.DictReader(file)
13
        # Iterate over CSV file, adding each title to set
14
15
        for row in reader:
            titles.add(row["title"])
16
17
18
    # Print titles in sorted order
19
    for title in sorted(titles):
        print(title)
20
```

```
# Prints unique titles in CSV, case insensitively
 1
 2
 3
    import csv
 4
    # For accumulating (and later sorting) titles
 5
    titles = set()
 6
    # Open CSV file
 8
    with open("favorites.csv", "r") as file:
 9
10
11
        # Create DictReader
12
        reader = csv.DictReader(file)
13
14
        # Iterate over CSV file, adding each (uppercased) title to set
15
        for row in reader:
            titles.add(row["title"].strip().upper())
16
17
18
    # Print titles in sorted order
19
    for title in sorted(titles):
        print(title)
20
```

```
# Prints popularity of titles in CSV, sorted by title
 1
 2
 3
    import csv
 4
    # For accumulating (and later sorting) titles
 5
    titles = {}
 6
 7
 8
    # Open CSV file
    with open("favorites.csv", "r") as file:
 9
10
11
        # Create DictReader
12
        reader = csv.DictReader(file)
13
        # Iterate over CSV file, adding each (uppercased) title to dictionary
14
        for row in reader:
15
16
            # Canoncalize title
17
18
            title = row["title"].strip().upper()
19
20
            # Count title
            if title in titles:
21
22
                titles[title] += 1
23
            else:
24
                titles[title] = 1
25
    # Print titles in sorted order
26
    for title in sorted(titles):
27
28
        print(title, titles[title])
```

```
# Prints popularity of titles in CSV, sorted by popularity
 1
 2
 3
    import csv
 4
    # For accumulating (and later sorting) titles
 5
    titles = {}
 6
 7
 8
    # Open CSV file
    with open("favorites.csv", "r") as file:
 9
10
11
        # Create DictReader
12
        reader = csv.DictReader(file)
13
        # Iterate over CSV file, adding each (uppercased) title to dictionary
14
        for row in reader:
15
16
17
            # Canoncalize title
18
            title = row["title"].strip().upper()
19
            # Count title
20
            if title in titles:
21
22
                titles[title] += 1
23
            else:
24
                titles[title] = 1
25
    # Function for comparing titles by popularity
26
    def get value(title):
27
28
        return titles[title]
29
    # Print titles in sorted order
30
31
    for title in sorted(titles, key=get_value, reverse=True):
32
        print(title, titles[title])
```

```
# Prints popularity of titles in CSV, sorted by popularity, using a lambda function
 1
 2
 3
    import csv
 4
    # For accumulating (and later sorting) titles
 5
    titles = {}
 6
 8
    # Open CSV file
    with open("favorites.csv", "r") as file:
 9
10
11
        # Create DictReader
12
        reader = csv.DictReader(file)
13
        # Iterate over CSV file
14
15
        for row in reader:
16
            # Canoncalize title
17
18
            title = row["title"].strip().upper()
19
20
            # Update counter
            if title in titles:
21
22
                titles[title] += 1
23
            else:
24
                titles[title] = 1
25
    # Print titles in sorted order
26
27
    for title in sorted(titles, key=lambda title: titles[title], reverse=True):
28
        print(title, titles[title])
```

```
# Searches CSV for popularity of a title
 1
 2
 3
    import csv
 4
    # Prompt user for title
 5
    title = input("Title: ").strip().upper()
 6
 7
    # Open CSV file
 8
    with open("favorites.csv", "r") as file:
 9
10
11
        # Create DictReader
12
        reader = csv.DictReader(file)
13
14
        # Iterate over CSV file, counting favorites
15
        counter = 0
        for row in reader:
16
17
            if row["title"].strip().upper() == title:
18
                counter += 1
19
    # Print popularity
20
    print(counter)
21
```

```
import csv
 1
    import re
 2
 4
    # For counting mentions of The Office
    counter = 0
 6
 7
    # Open CSV File
    with open("favorites.csv", "r") as file:
 8
 9
10
        # Create DictReader
11
        reader = csv.DictReader(file)
12
13
        # Iterate over CSV file, counting mentions of OFFICE and THE OFFICE
14
        for row in reader:
15
            title = row["title"].strip().upper()
            if re.search("^(OFFICE|THE OFFICE)$", title):
16
17
                counter += 1
18
    # Print popularity
19
    print(f"Number of people who like The Office: {counter}")
20
```

```
# Imports titles and genres from CSV into a SQLite database
 1
 2
 3
     import cs50
     import csv
     # Create database
 6
     open("favorites8.db", "w").close()
 7
     db = cs50.SQL("sqlite:///favorites8.db")
 9
10
     # Create tables
     db.execute("CREATE TABLE shows (id INTEGER, title TEXT NOT NULL, PRIMARY KEY(id))")
11
     db.execute("CREATE TABLE genres (show id INTEGER, genre TEXT NOT NULL, FOREIGN KEY(show id) REFERENCES
12
shows(id))")
13
     # Open CSV file
14
15
     with open("favorites.csv", "r") as file:
16
         # Create DictReader
17
         reader = csv.DictReader(file)
18
19
20
         # Iterate over CSV file
21
         for row in reader:
22
23
             # Canoncalize title
24
             title = row["title"].strip().upper()
25
26
             # Insert title
27
             show_id = db.execute("INSERT INTO shows (title) VALUES(?)", title)
28
             # Insert genres
29
             for genre in row["genres"].split(", "):
30
                 db.execute("INSERT INTO genres (show id, genre) VALUES(?, ?)", show id, genre)
31
```

```
# Searches CSV for popularity of a title
 1
 2
 3
    import csv
 4
    from cs50 import SQL
 5
 6
 7
    # Open database
    db = SQL("sqlite:///favorites.db")
 8
 9
10
    # Prompt user for title
11
    title = input("Title: ").strip()
12
13
    # Search for title
    rows = db.execute("SELECT COUNT(*) AS counter FROM favorites WHERE title LIKE ?", "%" + title + "%")
14
15
16
    # Get first (and only) row
17
    row = rows[0]
18
19
    # Print popularity
    print(row["counter"])
20
```