../README.txt

```
1 ../README.txt
2
3 favorites/favorites{0,1,2,3,4}.py
4 favorites/favorites{5,6,7,8,9,10}.py
5 favorites/favorites11.py
```

```
1
    # Prints all favorites in CSV using csv.reader
 2
    import csv
 3
 5
    # Open CSV file
    with open("favorites.csv", "r") as file:
 6
 7
 8
        # Create reader
        reader = csv.reader(file)
 9
10
11
        # Skip header row
12
        next(reader)
13
14
        # Iterate over CSV file, printing each favorite
        for row in reader:
15
            print(row[1])
16
```

```
# Stores favorite in a variable
 1
 2
 3
    import csv
 4
 5
    # Open CSV file
    with open("favorites.csv", "r") as file:
 6
 7
 8
        # Create reader
        reader = csv.reader(file)
 9
10
11
        # Skip header row
12
        next(reader)
13
        # Iterate over CSV file, printing each favorite
14
        for row in reader:
15
            favorite = row[1]
16
17
            print(favorite)
```

```
# Prints all favorites in CSV using csv.DictReader
 1
 2
    import csv
 3
 5
    # Open CSV file
    with open("favorites.csv", "r") as file:
 6
 7
 8
        # Create DictReader
        reader = csv.DictReader(file)
 9
10
11
        # Iterate over CSV file, printing each favorite
        for row in reader:
12
            favorite = row["language"]
13
14
            print(favorite)
```

```
# Prints all favorites in CSV using csv.DictReader
 2
    import csv
 3
 5
    # Open CSV file
    with open("favorites.csv", "r") as file:
 6
 8
        # Create DictReader
        reader = csv.DictReader(file)
 9
10
11
        # Iterate over CSV file, printing each favorite
        for row in reader:
12
            print(row["language"])
13
```

```
# Counts favorites using variables
 1
 2
    import csv
 3
 4
    # Open CSV file
 5
    with open("favorites.csv", "r") as file:
 6
 7
        # Create DictReader
 8
9
        reader = csv.DictReader(file)
10
11
        # Counts
12
        scratch, c, python = 0, 0, 0
13
14
        # Iterate over CSV file, counting favorites
15
        for row in reader:
16
            favorite = row["language"]
17
            if favorite == "Scratch":
18
                scratch += 1
19
            elif favorite == "C":
                c += 1
20
            elif favorite == "Python":
21
                python += 1
22
23
24
    # Print counts
25
    print(f"Scratch: {scratch}")
    print(f"C: {c}")
26
    print(f"Python: {python}")
27
```

```
# Counts favorites using dictionary
 1
 2
    import csv
 3
    # Open CSV file
 5
    with open("favorites.csv", "r") as file:
 6
 7
        # Create DictReader
 8
        reader = csv.DictReader(file)
 9
10
11
        # Counts
12
        counts = \{\}
13
14
        # Iterate over CSV file, counting favorites
15
        for row in reader:
16
            favorite = row["language"]
17
            if favorite in counts:
18
                counts[favorite] += 1
19
            else:
20
                counts[favorite] = 1
21
22
    # Print counts
    for favorite in counts:
23
24
        print(f"{favorite}: {counts[favorite]}")
```

```
# Sorts favorites by key
 1
 2
    import csv
 3
 4
    # Open CSV file
 5
    with open("favorites.csv", "r") as file:
 6
 7
        # Create DictReader
 8
        reader = csv.DictReader(file)
 9
10
11
        # Counts
        counts = {}
12
13
14
        # Iterate over CSV file, counting favorites
15
        for row in reader:
16
            favorite = row["language"]
17
            if favorite in counts:
18
                counts[favorite] += 1
19
            else:
20
                counts[favorite] = 1
21
22
    # Print counts
    for favorite in sorted(counts):
23
24
        print(f"{favorite}: {counts[favorite]}")
```

```
# Sorts favorites by value using .get
 1
 2
    import csv
 3
 4
    # Open CSV file
 5
    with open("favorites.csv", "r") as file:
 6
 7
        # Create DictReader
 8
        reader = csv.DictReader(file)
 9
10
11
        # Counts
12
        counts = \{\}
13
14
        # Iterate over CSV file, counting favorites
15
        for row in reader:
16
            favorite = row["language"]
17
            if favorite in counts:
18
                counts[favorite] += 1
19
            else:
20
                counts[favorite] = 1
21
22
    # Print counts
    for favorite in sorted(counts, key=counts.get, reverse=True):
23
24
        print(f"{favorite}: {counts[favorite]}")
```

```
# Sorts favorites by value using .get
 1
 2
    import csv
 3
 4
    from collections import Counter
 5
 6
 7
    # Open CSV file
    with open("favorites.csv", "r") as file:
 8
9
10
        # Create DictReader
        reader = csv.DictReader(file)
11
12
13
        # Counts
14
        counts = Counter()
15
16
        # Iterate over CSV file, counting favorites
17
        for row in reader:
18
            favorite = row["language"]
19
            counts[favorite] += 1
20
21
    # Print counts
    for favorite, count in counts.most common():
22
        print(f"{favorite}: {count}")
23
```

```
# Favorite problem instead of favorite language
 1
 2
 3
    import csv
 4
    from collections import Counter
 5
 6
 7
    # Open CSV file
    with open("favorites.csv", "r") as file:
 8
 9
10
        # Create DictReader
        reader = csv.DictReader(file)
11
12
13
        # Counts
14
        counts = Counter()
15
16
        # Iterate over CSV file, counting favorites
17
        for row in reader:
18
            favorite = row["problem"]
19
            counts[favorite] += 1
20
21
    # Print counts
    for favorite, count in counts.most common():
22
        print(f"{favorite}: {count}")
23
```

```
# Gets a specific count
 1
 2
 3
    import csv
 4
 5
    from collections import Counter
 6
7
    # Open CSV file
    with open("favorites.csv", "r") as file:
 8
9
10
        # Create DictReader
        reader = csv.DictReader(file)
11
12
13
        # Counts
14
        counts = Counter()
15
16
        # Iterate over CSV file, counting favorites
17
        for row in reader:
18
            favorite = row["problem"]
19
            counts[favorite] += 1
20
    # Print count
21
    favorite = input("Favorite: ")
22
    print(f"{favorite}: {counts[favorite]}")
```

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