Topic 69 - CSV Files: Picking Information Out of Them

**What**

* The CSV file competitions.csv contains a list of events and their corresponding winners.
* The task is to search for a competition by its name and find out who the winner was.
* This can be done by reading the CSV file, finding the index of the competition name, and then using that index to find the winner.

**How**

1. **CSV File Format**  
   The CSV file contains the following data:

sql

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Year,Event,Winner

1995,Best-Kept Lawn,None

1999,Gobstones,Welch National

2006,World Cup,Burkina Faso

1. **Reading the CSV File**  
   As before, open the file using csv.reader():

python

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with open("competitions.csv") as f:

contents\_of\_f = csv.reader(f)

1. **Searching for a Competition**  
   After reading the CSV data into a list, you can search for a specific competition. To find the winner of a competition, we need to know the index of the competition in the list. The method index() can help us get the index of the competition name.
2. **Steps for Finding the Winner**

a. **Get User Input**:  
Prompt the user to enter the name of a competition:

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target = input("Enter the name of a competition: ")

b. **Find the Index of the Competition**:  
Use index() to find the position of the competition in the list:

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index\_number\_of\_target = potter\_competitions.index(target)

c. **Find the Winner's Index**:  
Since the winner is listed immediately after the competition name in the CSV data, add 1 to the competition's index to get the winner's index:

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index\_number\_of\_winner = index\_number\_of\_target + 1

d. **Retrieve the Winner**:  
Look up the winner using the index:

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the\_winner = potter\_competitions[index\_number\_of\_winner]

e. **Display the Winner**:  
Finally, print out the winner:

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print("The winner was " + the\_winner)

**Example Code**

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import csv

with open("competitions.csv") as f:

contents\_of\_f = csv.reader(f)

potter\_competitions = []

for each\_line in contents\_of\_f:

potter\_competitions += each\_line

target = input("Enter the name of a competition: ")

index\_number\_of\_target = potter\_competitions.index(target)

index\_number\_of\_winner = index\_number\_of\_target + 1

the\_winner = potter\_competitions[index\_number\_of\_winner]

print("The winner was " + the\_winner)

**Output Example**

If the user enters Best-Kept Lawn, the code will find that the winner is None and display:

css

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The winner was None

**Key Points**

* **Finding the Index**: The index() method helps locate the position of a competition in the list.
* **Accessing the Winner**: The winner's information is just after the competition name, so we simply add 1 to the index to get the winner's index.
* **User Input**: The user enters a competition name, and the program outputs the winner for that competition.