

# 1 CSC299 - Lab Assignment 6

## IMPORTANT INSTRUCTIONS

Use this URL to verify your progress:

<https://mdp.cdm.depaul.edu/csc299>

Login into:

[mdp.cdm.depaul.edu](https://mdp.cdm.depaul.edu)

Under your csc299 folder create a new folder called lab06 and, under the latter, create a new file called `README.json`. This file should contain:

```
{"student_id": "<yourstudentid>", "name": "<yourname>", "email": "<youremail>"}
```

After completing each task below remember to do:

```
git add README.json
git add *.csv
git add *.py
git commit -a -m "task completed"
git push
```

else I will not receive your work.

### 1.1 Task 1 (3 points)

Create a new folder `/csc299/lab06` and `cd` under that folder.

Write a program `program61.py` that connects to

<http://www.superherodb.com/characters/>

extracts the names of all the Superheroes listed in the page and saves the names in a CSV file `names.csv`. The CSV file should have a column with header:

`NAME`

YOU MUST USE `csv.writer`. You can use `mechanize`, `BeautifulSoup`, or a combination of them.

## 1.2 Task 2 (3 points)

Write a program `program62.py` that connects to

`http://www.superherodb.com/superman/10-791/`

and extracts the powerstats of Superman, specifically his intelligence, strength, speed, durability, power, and combat ratings; and saves the info in a CSV file `superman.csv`. The CSV file should have one single record and a header like:

NAME, INTELLIGENCE, STRENGTH, SPEED, DURABILITY, POWER, COMBAT

## 1.3 Task 3 (3 points)

Write a program `program63.py` that downloads the powerstats of all listed superheroes (it is ok to stop at the first 10 in alphabetical order) and downloads all their powerstats in a file `superheroes.csv`. The CSV file should have a header like:

NAME, INTELLIGENCE, STRENGTH, SPEED, DURABILITY, POWER, COMBAT

If, information is missing, omit it (empty string).

## 1.4 Task 4 (3 points)

Write a program `program64.py` that reads the output of the above file, adds up the 6 powerstats for each superhero and ranks them from the most powerful to the weakest. Do not list superheroes with missing information. Write the output sorted ranking in a CSV file, `ranking.csv`, of the form:

RANK, NAME, TOTAL POWERS