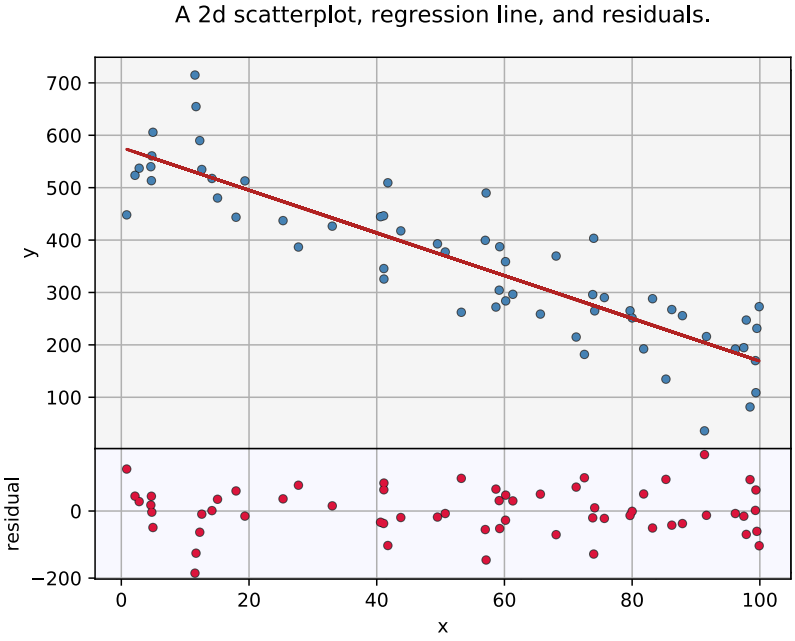
CSCI 362: Machine Learning **Assignment 2**
Fall 2022 **Simple linear regression**

Please submit a single document for this assignment on Canvas by the beginning of class on Friday, Sept. 9th.

Consider the point cloud in the xy-plane consisting of the 60 blue points pictured below.



The data determining the points is contained in the csv (comma separated values) file `assign2.csv` which you can download from Canvas.

Download `assign2.csv` to your working directory for this assignment and have a look at its contents.

The following code will read the data from `assign2.csv` into torch tensors.

```
import torch
import csv

with open('assign2.csv') as csvfile:
    reader = csv.reader(csvfile, delimiter=',')
    next(csvfile)  # skip the first line
    xs, ys = [], []
    for row in reader:
        xs.append(float(row[0]))
        ys.append(float(row[1]))

xs, ys = torch.tensor(xs), torch.tensor(ys)
```

Finish this assignment by adding code to the program above to compute and print the slope and intercept of the least squares regression line — the red line in the graphic above.

Include a screenshot of your program and its output in your solution document.