Advent of code day 1

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Introduction

In this assignment the student chose one challenge from the first six days in the Advent of code 2022. The student chose to do the first day's task.

Task 1

In the problem there were elves carrying calories and the task was to figure out how many calories that were carried by the Elf carrying the most calories given a list. The assignment was mainly an assignment in parsing the input correctly to be able to sum up the different elves calories and calculate how much the maximum was.

```
def task1 do
    File.read!("calories.csv")
    |> String.split("\n\n")
    |> Enum.map(&String.split(&1, "\n"))
    |> Enum.map(fn inputs ->
      inputs
      |> Enum.map(&String.to_integer/1)
      |> Enum.sum
    end)
    |> Enum.max()
end
```

In order to find out the maximum sum of the elf carrying the most calories, the list was first split so one list element (in the nested list) consisted of all the calories carried by one elf. It was then possible to convert each entry to integers to be able to sum it up. When all list elements were summed up, the max could easily be found by using the Enum.max function on the list.

Task 2

The second task of the assignment asked for the sum of the three elves carrying the most calories. The same process as in task 1 was used.

```elixir
def task2 do
    File.read!("calories.csv")
    |> String.split("\n\n")
    |> Enum.map(& String.split(&1, "\n"))
    |> Enum.map(fn inputs ->
      inputs
      |> Enum.map(&String.to_integer/1)
      |> Enum.sum
    end)
    |> Enum.sort(:desc)
    |> Enum.take(3)
    |> Enum.sum()
end
```

When all the elves had their collection of calories summed up in an integer list it was possible to sort it in descending order. This made it easy to pick out the top three sums of calories and simply adding them up. This concluded the day 1 Advent of code challenge.

Results

Task 1 yielded: 71124 calories and task 2 yielded: 204639 calories.