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Online coding site: **Ancient Brain**

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Online AI coding exercises

Project ideas

Einstein - stock prices

Assignment

Write a program to go on the Internet and get the price of a stock.
Usage like:
```
getprice (stock symbol)
```
For example:

- ```getprice goog```
- ```getprice msft```

Analysis

- We are going to use the stock pages at MarketWatch.com
- For example, their Google page is:

  http://bigcharts.marketwatch.com/quickchart/quickchart.asp?symb=goog

- "View source" and we see that the stock price is in a section like this:

  ```
  <span class="label">Last:</span>
  <div>1,835.74</div>
  ```

- So if we search for a section like this, we will find the price. (Note how our script may fail in the future.)

Recipe

You can deviate from this recipe if you like, so long as the program works and prints the stock price.

At each step, check it works *before* proceeding to the next step.
Do *not* try to solve it all in one go.

1. Use **wget** to fetch the page and output to the command line. The URL of the page depends on the **command-line argument**.
2. Pipe to **tr** to remove all Windows end of line characters.
3. Pipe to **tr** to put the entire file onto a single line.
4. Pipe to **sed** to remove everything from start-of-line to ```Last:```
5. Pipe to **sed** to remove everything from ```</div>``` to end-of-line.
6. Pipe to **sed** again until you are left with just the stock price.

Debug it on student Linux

Test it by running:

- `getprice goog`
- `getprice msft`

Your program should just print the price.

Upload to Einstein

- Rename it to getprice.sh
- Upload to Einstein for marking.

- Warning: Volatile trading period.
  - At some times, the stock price will change rapidly due to trading. Einstein checks the price and then checks what you think the price is. Even though this is only a tiny interval later, the price could have changed, so Einstein thinks your program is wrong.
  - Solution: Run it again until the price is stable.
  - I round to the nearest whole number, so hopefully this problem will hardly ever happen.

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ancientbrain.com   **w2mind.org**   **humphrysfamilytree.com**

On the Internet since **1987**.

Note: Links on this site to user-generated content like Wikipedia are **highlighted in red** as possibly unreliable. My view is that such links are **highly useful but flawed**.