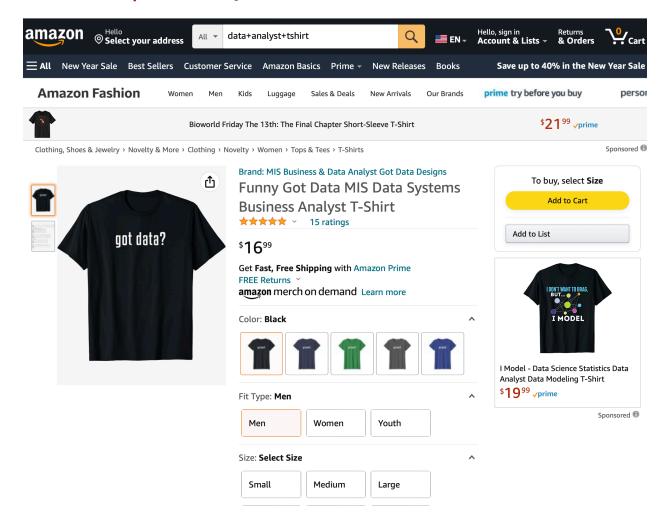```python
This Python program checks the price of an Amazon item
everyday.

# import libraries
from bs4 import BeautifulSoup
import requests
import smtplib
import time
import datetime

# connect to website
URL = 'https://www.amazon.com/Funny-Data-Systems-Business-
Analyst/dp/B07FNW9FGJ/ref=sr_1_14?
crid=1293SFHKWAVM9&keywords=data%2Banalyst%2Btshirt&qid=16725110
25&sprefix=data%2Banalyst%2Btshirt%2Caps%2C145&sr=8-14'
headers = {"User-Agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X
10_15_7) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/16.1
Safari/605.1.15", "Accept-Encoding":"gzip, deflate",
"Accept":"text/html,application/xhtml+xml,application/
xml;q=0.9,*/*;q=0.8", "DNT":"1","Connection":"close", "Upgrade-
Insecure-Requests":"1"}
```



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Fit Type: **Men**                                    ⌃

| Men | Women | Youth |

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```python
page=requests.get(URL, headers=headers)
soup1 = BeautifulSoup(page.content, "html.parser")
soup2 = BeautifulSoup(soup1.prettify(), "html.parser")
print(soup2)
```

```
:!DOCTYPE html>

:html class="a-no-js" data-19ax5a9jf="dingo" lang="en-us">
:!-- sp:feature:head-start -->
:head>
:script>
  var aPageStart = (new Date()).getTime();
  </script>
:meta charset="utf-8"/>
:!-- sp:end-feature:head-start -->
:!-- sp:feature:csm:head-open-part1 -->
:script type="text/javascript">
  var ue_t0=ue_t0||+new Date();
  </script>
:!-- sp:end-feature:csm:head-open-part1 -->
:!-- sp:feature:cs-optimization -->
:meta content="on" http-equiv="x-dns-prefetch-control"/>
:link href="https://images-na.ssl-images-amazon.com" rel="dns-prefetch"/>
:link href="https://m.media-amazon.com" rel="dns-prefetch"/>
:link href="https://completion.amazon.com" rel="dns-prefetch"/>
```

```python
# get information
title = soup2.find(id='productTitle').get_text()
print(title)
```

```
        Funny Got Data MIS Data Systems Business Analyst T-Shirt
```

```python
price = soup2.find(id='corePriceDisplay_desktop_feature_div').get_text()
```

$16.99

$

16

.

99

```python
# format information
price = price.split()[0][1:]
title = title.strip()
print(title)
print(price)
```

Funny Got Data MIS Data Systems Business Analyst T-Shirt
16.99

```python
type(price)

# get date stamp
today = datetime.date.today()
print(today)

# create csv file
import csv

# define csv columns
header = ['Title', 'Price', 'Date']

#define csv data
data = [title, price, today]

type(data)

# write to csv file
with open('/Users/jan/desktop/data/jy/future/codesamples/python/
Amazon/AmazonWebScraperDataset.csv', 'w', newline='',
encoding='UTF8') as f:
    writer = csv.writer(f)
    writer.writerow(header)
    writer.writerow(data)

#import csv file
import pandas as pd

df = pd.read_csv('/Users/jan/desktop/data/jy/future/codesamples/
python/Amazon/AmazonWebScraperDataset.csv')
print(df)
```

```
                                     Title  Price        Date
0  Funny Got Data MIS Data Systems Business Analy...  16.99  2022-12-31
```

```python
# append data to csv file
with open('/Users/jan/desktop/data/jy/future/codesamples/python/
Amazon/AmazonWebScraperDataset.csv', 'a+', newline='',
encoding='UTF8') as f:
    writer = csv.writer(f)
    writer.writerow(data)


#import csv file
import pandas as pd

df = pd.read_csv('/Users/jan/desktop/data/jy/future/codesamples/
python/Amazon/AmazonWebScraperDataset.csv')
print(df)
```

```
                                           Title  Price        Date
0  Funny Got Data MIS Data Systems Business Analy...  16.99  2022-12-31
1  Funny Got Data MIS Data Systems Business Analy...  16.99  2022-12-31
```

```python
def check_price():
    URL = 'https://www.amazon.com/Funny-Data-Systems-Business-
Analyst/dp/B07FNW9FGJ/ref=sr_1_14?
crid=1293SFHKWAVM9&keywords=data%2Banalyst%2Btshirt&qid=16725110
25&sprefix=data%2Banalyst%2Btshirt%2Caps%2C145&sr=8-14'
    headers = {"User-Agent": "Mozilla/5.0 (Macintosh; Intel Mac
OS X 10_15_7) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/
16.1 Safari/605.1.15", "Accept-Encoding":"gzip, deflate",
"Accept":"text/html,application/xhtml+xml,application/
xml;q=0.9,*/*;q=0.8", "DNT":"1","Connection":"close", "Upgrade-
Insecure-Requests":"1"}
    page=requests.get(URL, headers=headers)
    soup1 = BeautifulSoup(page.content, "html.parser")
    soup2 = BeautifulSoup(soup1.prettify(), "html.parser")

    # get information
    title = soup2.find(id='productTitle').get_text()
    price =
soup2.find(id='corePriceDisplay_desktop_feature_div').get_text()


    # format information
    price = price.split()[0][1:]
    title = title.strip()
```

```python
    # get date stamp
    today = datetime.date.today()

    # define csv columns
    header = ['Title', 'Price', 'Date']

    #define csv data
    data = [title, price, today]

    # append data to csv file
    with open('/Users/jan/desktop/data/jy/future/codesamples/
python/Amazon/AmazonWebScraperDataset.csv', 'a+', newline='',
encoding='UTF8') as f:
        writer = csv.writer(f)
        writer.writerow(data)


# check price every 5 seconds
while (True):
    check_price()
    time.sleep(5)
```

manually stop running after 10 seconds

```
KeyboardInterrupt                         Traceback (most recent call last)
/var/folders/0y/2sf9nfpn6c3_nxjt5ys__r180000gq/T/ipykernel_49427/364068478.py in <module
>
      1 while (True):
      2     check_price()
----> 3     time.sleep(5)

KeyboardInterrupt:
```

```python
df = pd.read_csv('/Users/jan/desktop/data/jy/future/codesamples/
python/Amazon/AmazonWebScraperDataset.csv')
print(df)
```

```
                                               Title  Price        Date
0  Funny Got Data MIS Data Systems Business Analy...  16.99  2022-12-31
1  Funny Got Data MIS Data Systems Business Analy...  16.99  2022-12-31
2  Funny Got Data MIS Data Systems Business Analy...  16.99  2022-12-31
3  Funny Got Data MIS Data Systems Business Analy...  16.99  2022-12-31
```

```python
# check price every day
while (True):
    check_price()
    time.sleep(24*60*60)
```