

# Forward School

**## Program Code: J620-002-4:2020**

**## Program Name: FRONT-END SOFTWARE DEVELOPMENT**

**## Title : Introduction of BeautifulSoup - Part 2**

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**#### Introduction : Learn how to get the data from Web page by accessing the HTML attributes**

**#### Conclusion : Still need to practice more and revise again**

## P13 - Introduction of BeautifulSoup - Part 2

**BeautifulSoup** is a library for **parsing HTML and XML documents**.

**Requests** with **BeautifulSoup** (a parsing library) are the best package tools for **small and quick web scraping**.

<https://www.crummy.com/software/BeautifulSoup/> (<https://www.crummy.com/software/BeautifulSoup/>)

<https://www.crummy.com/software/BeautifulSoup/bs4/doc/>  
(<https://www.crummy.com/software/BeautifulSoup/bs4/doc/>)

### Installation

pip3 install bs4

conda install -c anaconda beautifulsoup4

## Methods

Find\_All

Find

In [8]:

```
from bs4 import BeautifulSoup
import requests
```

In [9]:

```
#page = requests.get("https://www.ebay.com.my/sch/Car-Truck-Parts/6030/i.html?_from=R40&")
page = requests.get("https://www.ebay.com.my/sch/Car-Truck-Parts/6030/i.html?_from=R40&")
page.status_code
```

Out[9]:

200

In [10]:

page.content

```
c.com"><link rel="dns-prefetch" href="//i.ebayimg.com"><link rel="dns-prefetch" href="//rover.ebay.com"><script>$s$gST=new Date().getTime();!function(){if("PerformanceLongTaskTiming" in window){var g=window.__tti={e:[]};g.o=new PerformanceObserver(function(l){g.e=g.e.concat(l.getEntries())});g.o.observe({entryTypes:["longtask"]})}}();</script><link rel="stylesheet" type="text/css" href="https://ir.ebaystatic.com/rs/v/1bhvbn1jri3ldkqaxcgulwmjwuw.css?proc=DU:N"><link rel="stylesheet" href="https://ir.ebaystatic.com/rs/c/inception-Robg8qPC.css">\n<link rel="stylesheet" href="https://ir.ebaystatic.com/rs/c/search-page-large-w_YpiDjU.css"><!--M#s0-5-9--><noscript data-marko-key="@_wbind s0-5-9" id=s0-5-9></noscript><!--M/--><style type=text/css>\n      :root {\n        --sd-s-dldd099: inline;\n        --sd-s-y8gr297: none;\n        --p4-s-dldd099: 100%;\n        --p4-s-y8gr297: 98%;\n      }\n      span.s-dldd099 {\n        display: inline;\n      }\n      span.s-y8gr297 {\n        display: none;\n      }\n      span.s-mzyl304 {\n        position: absolute;\n        left: -200px;\n        top: auto;\n        width: 1px;\n        height: 1px;\n        overflow: hidden;\n      }\n      .s-item__pl-on-bottom span.s-y8gr297_s-dldd099,\n      .s-item__pl-on-bottom span.s-dldd099_s-y8gr297 {\n        position: absolute;\n        bottom: 0;\n      }\n      .skin-small .s-item__dsa-on-bottom.s-item__pl-on-bottom span.s-y8gr297_s-dldd099,\n      .ski
```

In [11]:

```
soup = BeautifulSoup(page.content, 'html.parser')
soup
```

Out[11]:

```
<!DOCTYPE html>
<!--[if IE 9]><html class="ie9" lang="en"><![endif]--><!--[if gt IE 9]>
<!--><html lang="en"><!--<![endif]--><!--M#s0-2--><noscript class="x-pa
ge-config"></noscript><!--M/--><head><meta content="IE=edge" http-equiv
="X-UA-Compatible"/><script>"use strict";if(window.PerformanceObserver&
&performance&&performance.mark&&performance.getEntriesByName){window.SR
P=window.SRP||{};var paintObserver=new window.PerformanceObserver((func
tion(e){var r=e.getEntries();if(r.sort((function(e,r){return e.startTim
e-r.startTime})),r&&!(r.length<2)){var n=r[1].startTime;window.SRP.TTI_
TIMER={lastInteractiveWindow:n};var t=new window.PerformanceObserver((f
unction(e){for(var r=e.getEntries(),i=0,a=r.length;i<a;i++)r[i].startTi
me-n>=5e3&&(window.SRP.TTI_TIMER.timeToInteract=n,t.disconnect()),n=r
[i].startTime+r[i].duration,window.SRP.TTI_TIMER.lastInteractiveWindow=
n}));t.observe({entryTypes:["longtask"]}),paintObserver.disconnect
({}));paintObserver.observe({entryTypes:["paint"]}]);</script><meta co
ntent="Find Proton from a vast selection of Car & Truck Parts &
Accessories. Get great deals on eBay!" name="description"><title>Proton
in Car & Truck Parts & Accessories | eBay</title><meta content
```

Observe that the downloaded page

In [12]:

```
print(soup.prettify())
--p4-s-y8gr297: 98%;
}
span.s-dldd099 {
  display: inline;
}
span.s-y8gr297 {
  display: none;
}
span.s-mzyl304 {
  position: absolute;
  left: -2000px;
  top: auto;
  width: 1px;
  height: 1px;
  overflow: hidden;
}
.s-item__pl-on-bottom span.s-y8gr297_s-dldd099,
.s-item__pl-on-bottom span.s-dldd099_s-y8gr297 {
  position: absolute;
  bottom: 0;
```

Observe that the HTML doc is now a human readable document

In [13]:

```
list(soup.children)
```

Out[13]:

```
['html',
 '[if IE 9]<html class="ie9" lang="en"><![endif]',
 '[if gt IE 9]><!',
 '<html lang="en"><!--<![endif]--><!--M#s0-2--><noscript class="x-page-c
onfig"></noscript><!--M/--><head><meta content="IE=edge" http-equiv="X-
UA-Compatible"/><script>"use strict";if(window.PerformanceObserver&&per
formance&&performance.mark&&performance.getEntriesByName){window.SRP=wi
ndow.SRP||{};var paintObserver=new window.PerformanceObserver((function
(e){var r=e.getEntries();if(r.sort((function(e,r){return e.startTime-r.
startTime})),r&&(r.length<2)){var n=r[1].startTime;window.SRP.TTI_TIME
R={lastInteractiveWindow:n};var t=new window.PerformanceObserver((funct
ion(e){for(var r=e.getEntries(),i=0,a=r.length;i<a;i++)r[i].startTime-n
>=5e3&&(window.SRP.TTI_TIMER.timeToInteract=n,t.disconnect()),n=r[i].st
artTime+r[i].duration,window.SRP.TTI_TIMER.lastInteractiveWindow=n}));
t.observe({entryTypes:["longtask"]}),paintObserver.disconnect()}));pai
ntObserver.observe({entryTypes:["paint"]})};</script><meta content="Fin
d Proton from a vast selection of Car & Truck Parts & Accessori
es. Get great deals on eBay!" name="description"><title>Proton in Car &
```

Now go back to Ebay Page and observe the listing for repeatable items

Observe the listed items and corresponding HTML tags

We want to grab all the product listed on the page

In [14]:

```
soup_list = soup.findAll("li", attrs={"class":"s-item s-item__pl-on-bottom"})
soup_list
```

Out[14]:

```
[<li class="s-item s-item__pl-on-bottom" data-view="mi:1686|iid:1" data-
viewport='{<trackableId>:"01GDF2P4GS7EBZ8M2AWN707B"}' id=""><div class
="s-item__wrapper clearfix"><!--F#f_0--><div class="s-item__image-secti
on"><div class="s-item__image"><a _sp="" aria-hidden="true" data-carous
el-tabindex="-1" data-interactions='[{"actionKind":"NAVSRC","interactio
n":"wwFVrK2vRE0lhQY0MREUzME5KNVY2VE1XNkJEMTUAAAg3NDAwDE5BVlNSQwA="}]' d
ata-s-dldd099='{<eventFamily>:"LST",<eventAction>:"ACTN",<actionKin
d>:"NAVSRC",<actionKinds>:["NAVSRC"],<operationId>:"",<flushImmediatel
y>:false,<eventProperty>:{<trackableId>:"01GDF2P4GS7EBZ8M2AWN707B",<int
eraction>:"wwFVrK2vRE0lhQY0MREUzME5KNVY2VE1XNkJEMTUAAAg3NDAwDE5BVlNSQwA
="}}' href="https://ebay.com/itm/123456?hash=item28caef0a3a:g:E3kAAOSw1
GJiMikD&amdata=enc%3AAQAHAHAASJoWxGf0hxNZspTmhb8%2FTJCCurAWChUxJ2Xi
3S9cwXL6BX04zSEiVaDMCvsUbApftgXEAHGJU1ZGugZ0%2FnW1U7Gb6vgoL%2BmXlqCbLkw
oZFF3AUAK8YvJ5B4%2BnhFA7ID4dxdpYs4jjExEnN5SR2g1mQe7QtLkmGt%2FZ%2FbH2W62c
XPuKbf550ExbnBP02QJyZTXYCuW5KVkMdFMDuoB4p3FwJKcSPzez5kyQyVjyiIq6PB2q%7C
tkp%3AB1BMULq7kqyXYA" tabindex="-1" target="_blank"><div class="s-item-
__image-wrapper image-treatment"><img alt="Shop on eBay" fetchpriority
="high" loading="eager" onerror="window.SRP.metrics.incrementCounter('i
```

In [15]:

```
for items in range(len(soup_list)):
    print(items)
```

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In [17]:

*#show only 1*

```
soup_list = soup.find("li", attrs={"class":"s-item s-item__pl-on-bottom"})
soup_list
```

Out[17]:

```
<li class="s-item s-item__pl-on-bottom" data-view="mi:1686|iid:1" data-viewport="{\"trackableId\":\"01GDF2P4GS7EBZ8M2AWN707B\"}" id=""><div class="s-item__wrapper clearfix"><!--F#f_0--><div class="s-item__image-section"><div class="s-item__image"><a _sp="" aria-hidden="true" data-carousel-tabindex="-1" data-interactions='[{"actionKind":"NAVSRC","interaction":"wwFVrK2vRE0lhQY0MREUzME5KNVY2VE1XNkJEMTUAAG3NDawDE5BVlNSQwA="}]' data-s-dlidd099='{"eventFamily":"LST","eventAction":"ACTN","actionKind":"NAVSRC","actionKinds":["NAVSRC"],"operationId":"","flushImmediately":false,"eventProperty":{"trackableId":"01GDF2P4GS7EBZ8M2AWN707B","interaction":"wwFVrK2vRE0lhQY0MREUzME5KNVY2VE1XNkJEMTUAAG3NDawDE5BVlNSQwA="}}' href="https://ebay.com/itm/123456?hash=item28caef0a3a:g:E3kAAOSwlGJiMikD&amp;amdata=enc%3AAQAHAAsJowXGf0hxNZspTmhb8%2FTJCCurAWCHuXJ2Xi3S9cwXL6BX04zSEiVaDMCvsUbApftgXEAHGJU1ZGugZ0%2FnW1U7Gb6vgoL%2BmXlqCbLkwoZfF3AUAK8YvJ5B4%2BnhFA7ID4dpxYs4jjExEnN5SR2g1mQe7QtLkmGt%2FZ%2FbH2W62cXPuKbf550ExbnBP02QJyZTXyCuW5KVkMdFMDuoB4p3FwJKcSPzez5kyQyVjyiIq6PB2q%7Ctkp%3ABlBMULq7kqyXYA" tabindex="-1" target="_blank"><div class="s-item__image-wrapper image-treatment"></div></a></div></div><div class="s-item__info clearfix"><a _sp="" class="s-item__link" data-interactions='[{"actionKind":"NAVSRC","interaction":"wwFVrK2vRE0lhQY0MREUzME5KNVY2VE1XNkJEMTUAAG3NDawDE5BVlNSQwA="}]' data-s-dlidd099='{"eventFamily":"LST","eventAction":"ACTN","actionKind":"NAVSRC","actionKinds":["NAVSRC"],"operationId":"","flushImmediately":false,"eventProperty":{"trackableId":"01GDF2P4GS7EBZ8M2AWN707B","interaction":"wwFVrK2vRE0lhQY0MREUzME5KNVY2VE1XNkJEMTUAAG3NDawDE5BVlNSQwA="}}' href="https://ebay.com/itm/123456?hash=item28caef0a3a:g:E3kAAOSwlGJiMikD&amp;amdata=enc%3AAQAHAAsJowXGf0hxNZspTmhb8%2FTJCCurAWCHuXJ2Xi3S9cwXL6BX04zSEiVaDMCvsUbApftgXEAHGJU1ZGugZ0%2FnW1U7Gb6vgoL%2BmXlqCbLkwoZfF3AUAK8YvJ5B4%2BnhFA7ID4dpxYs4jjExEnN5SR2g1mQe7QtLkmGt%2FZ%2FbH2W62cXPuKbf550ExbnBP02QJyZTXyCuW5KVkMdFMDuoB4p3FwJKcSPzez5kyQyVjyiIq6PB2q%7Ctkp%3ABlBMULq7kqyXYA" tabindex="-1" target="_blank"><div class="s-item__title"><span aria-level="3" role="heading"><!--F#f_0-->Shop on eBay<!--F/--></span></div><span class="clipped">Opens in a new window or tab</span></a><div class="s-item__subtitle"><!--F#f_0--><span class="SECONDARY_INFO">Brand New</span><!--F/--></div><div class="s-item__details clearfix"><div class="s-item__detail s-item__detail--primary"><span class="s-item__price"><!--F#f_0--><!--F#f_0-->$20.00<!--F/--><!--F/--></span></div><div class="s-item__detail s-item__detail--primary"><span class="s-item__purchase-options s-item__purchaseOptions"><!--F#f_0-->or Best Offer<!--F/--></span></div><div class="s-item__detail s-item__detail--primary"><span><div aria-labelledby="s-dlidd099" class="s-dlidd099_s-y8gr297" role="text"><span aria-hidden="true"><wbr/>Sponsored</span></div></span><span class="s-item__space_bar"></span></div></div><!--F/--></div></li>
```

In [20]:

```
# FindALL but get the Nth item from the Match  
soup_list = soup.findAll("li", attrs={"class":"s-item s-item__pl-on-bottom"})[1]  
soup_list
```



Out[20]:

```

<li class="s-item s-item__pl-on-bottom" data-view="mi:1686|iid:1" data-viewport="{\"trackableId\":\"01H4D61JA22Y9ECB5PTNR7WXHP\"}" id="item54d3c37da6"><div class="s-item__wrapper clearfix"><!--F#f_0--><div class="s-item__image-section"><div class="s-item__image"><a _sp="p2351460.m1686.l7400" aria-hidden="true" data-carousel-tabindex="-1" data-interactions='[{"actionKind":"NAVSRC","interaction":"wwFVrK2vRE0lhQQ0MDFINEQ2MUPEQVLGVERRRzExV1RKRkFCRFA0MDFINEQ2MUPEQVLGVERRRzExV1RKRkF"}]' data-s-dlidd099='{"eventFamily":"LST","eventAction":"ACTN","actionKind":"NAVSRC","actionKinds":["NAVSRC"],"operationId":"2351460","flushImmediately":false,"eventProperty":{"$1":"520052781756278"}}' href="https://www.ebay.com/my/item/364330057126?hash=item54d3c37da6:g:XMkAAOSwGD5koEyF&amp;amdata=enc%3AAQAIAAAA4NJJj3lEbzzWmNbd%2BzBhMvIqqwe3ehxTlTeUIDJ%2FvFYsB960MDliHFW%2BhtbbeNwNpWo5ksXvblEWmq4opNsGs5ZAFmmybloGpUXBkZJwGCy1v%2BRZvdLnr1UKmMD6XbWfTtJww%2BY7kFjzDK6bfh0a9cibcbd%2FpUa9K6Cw0X1qvwm9FGACi25t92tg8oC2VLH3F9GRtVz8f95S000ZCEmoJitSTyEdus82%2B8M1s8DTPY0lx4%2F6ddVae3ScE%2BZA5B14QTaAUz93YgIhIVxUiZSwc9u3ekxT5s11PIMfzLop8rj%7Ctkp%3ABk9SR46lhqajYg" tabindex="-1" target="_blank"><div class="s-item__image-wrapper image-treatment"></div></a></div><!--M#s0-53-16-6-3-3[0]-10-1-14--><span class="s-item__watchheart on-image s-item__watchheart--watch"><a _sp="" aria-label="watch Proton Saga Mitsuboshi CPK865 Original Fan Belt Brand New" class="s-item__watchheart-click" data-s-dlidd099='{"eventFamily":"LST","eventAction":"ACTN","actionKind":"NAVSRC","actionKinds":["NAVSRC"],"operationId":"2351460","flushImmediately":false,"eventProperty":{"trackableId\":\"01H4D61JA22Y9ECB5PTNR7WXHP\",\"clickaction\":\"WATCHH\",\"amdata\":\"amclksrc=A2W\",\"adctrl\":\"AD_CTRL_ATW_ADD\",\"enc\":\"AQAIAAAA4NJJj3lEbzzWmNbd+zBhMvIqqwe3ehxTlTeUIDJ/vFYsB960MDliHFW+htbbeNwNpWo5ksXvblEWmq4opNsGs5ZAFmmybloGpUXBkZJwGCy1v+RZvdLnr1UKmMD6XbWfTtJww+Y7kFjzDK6bfh0a9cibcbd/pUa9K6Cw0X1qvwm9FGACi25t92tg8oC2VLH3F9GRtVz8f95S000ZCEmoJitSTyEdus82+8M1s8DTPY0lx4/6ddVae3ScE+ZA5B14QTaAUz93YgIhIVxUiZSwc9u3ekxT5s11PIMfzLop8rj\",\"moduledtl\":\"p2351460.m4114.l8480\",\"sid\":\"p2351460.m4114.l8480\"}}' href="https://www.ebay.com/my/myb/WatchListAdd?item=364330057126&amp;pt=null&amp;srt=01000800000050ca9630f5910676e191c73fa720d807efaf1117df72ba4e6bea464e62e64e408d4dc8b65af89a74eca5068d459dbce9c2da41a7e35f6786c1624532f27c3588fe3a6913bb093772daafc841223832226&amp;ru=https%3A%2F%2Fwww.ebay.com.my%2Fsearch%2FCar-Truck-Parts%2F6030%2Fi.html%3F_from%3DR40%26_nkw%3DProton%26rt%3Dnc%26_pppn%3Dr1%26_fsrp%3D1"><span class="s-item__watchheart-icon"><!--M#s0-53-16-6-3-3[0]-10-1-14-8-1-10-1-0--><svg aria-hidden="true" class="icon icon--save-24" focusable="false"><defs data-marko-key="@defs s0-53-16-6-3-3[0]-10-1-14-8-1-10-1-0"><symbol id="icon-save-24" viewBox="0 0 24 24"><path clip-rule="evenodd" d="M12 4.467c-.76-.817-1.488-1.395-2.213-1.785C8.798 2.15 7.877 2 7 2 3.153 2 1 5.079 1 8.21c0 2.193 1.262 3.873 2.27 4.948l8 8.526a.996.996 0 0 1.46 0l3.998-4.261v-.001l4.001-4.264C21.738 12.083 23 10.403 23 8.21 23 5.079 20.847 2 17 2c-.878 0-1.798.15-2.787.682-.725.39-1.452.968-2.213 1.785Zm-.792 2.144c-.943-1.177-1.716-1.816-2.37-2.168C8.202 4.1 7.622 4 7 4 4.484 4 3 5.942 3 8.21c0 1.408.816 2.606 1.73 3.58L12 19.538l7.27-7.75C20.184 10.815 21 9.617 21 8.21 21 5.942 19.516 4 17 4c-.62 0-1.201.1-1.838.443-.654.352-1.427.991-2.37 2.168a1.015 1.015 0 0 1-.38 1.301 1.002 1.002 0 0 1-1.203-.301Z" fill-rule="evenodd"></path></symbol></defs><use xlink:href="#icon-save-24"></use></svg><!--M/--><!--M#s0-53-16-6-3-3[0]-10-1-14-8-1-10-2-0--><svg aria-hidden="true" class="icon icon--save-filled-24" focusable="false"><defs data-marko-key="@defs s0-53-16-6-3-3[0]-10-1-14-8-1-10-2-0"><symbol id="icon-save-filled-24" viewBox="0 0 24 24"><path d="M7 2C3.153 2 1 5.079 1 8.21c0 2.193 1.262 3.873 2.27 4.948l8 8.526a1 1 0 0 1.46 0l8-8.526C21.737 12.083 23 10.403 23 8.21 23 5.079 2 0.847 2 17 2c-.878 0-1.798.15-2.787.682-.725.39-1.452.968-2.213 1.785-.76

```



In [27]:

```
soup_list = soup.findAll("li", attrs={"class":"s-item s-item__pl-on-bottom"})
for items in range(len(soup_list)):
    print(soup_list[items].find("div", attrs={"class":"s-item__title"}).text)
```

Shop on eBay

Proton Saga Mitsuboshi CPK865 Original Fan Belt Brand New

4D68 For MITSUBISHI GALANT OR PROTON PERSONA 400 Engine Rebuild Kits Auto Engine

Tail Lamp Proton Perdana V6 RH

New ListingProton Satria Phase 1 94-05 Drivers Manual Door Mirror

New ListingProton Satria 94-05 Passenger Electric Window Regulator

5PK865 GATES V-Ribbed Belt for BMW,BYD,FERRARI,MITSUBISHI,PROTON,TOYOTA,ZHONGHUA

New Listing1 987 949 536 ENGINE TIMING BELT CAM BELT BOSCH NEW OE REPLACEMENT

CT841 CONTITECH TIMING BELT (Mitsubishi, Proton 1.6 92-) NEW O.E SPEC!

New ListingBOSCH ZAHNRIEMEN STEUERRIEMEN 1 987 948 832 P FÜR PROTON SATRIA,PERSONA 400

New ListingENGINE TIMING BELT CAM BELT CONTITECH CT738 A FOR PROTON PERSONA 400,WIRA

New ListingENGINE TIMING BELT CAM BELT CONTITECH CT821 P FOR PROTON PERSONA 400 1.8L 85KW

Keilrippenriemen MAPCO 261675 für AUDI CITROËN FIAT FORD PEUGEOT PROTON RENAULT

Timing Belt fits PROTON SATRIA 1.6 96 to 00 4G92 Contitech MD176386 Quality New

New Genuine DAYCO Timing Belt Camshaft For Proton Persona Satria Wira #94510

DAYCO TIMING BELT KIT for PROTON SUPRIMA 01/2014-on 1.6 4cyl TMPFI TURBO CRIAFM

BOSCH ZAHNRIEMEN STEUERRIEMEN 1 987 949 518 P FÜR PROTON SAVVY 1.2 1.2L 55KW

New DAYCO Timing Belt Kit For Proton M21 KTBA120

GATES K014PK928 V-Ribbed Belt Set for DACIA,NISSAN,PROTON,RENAULT

Courroie Dentée AE TB380 Compatible Avec Dayco KTB380 - Mitsubishi/Proton

GATES Timing Belt/Water Pump Kit for Proton Savvy 1.2 Oct 2005 to Oct 2012

Timing Belt fits PROTON 1.5 1.5 88 to 91 QH MD113564 Genuine Quality Guaranteed

GATES Timing Belt Kit To Suit Proton Persona 316 GLXi Petrol

Dayco Timing Belt T1353 fits MITSUBISHI/ PROTON 94904

ZAHNRIEMEN STEUERRIEMEN BOSCH 1 987 949 064 P NEU OE QUALITÄT

New V-Ribbed Belt for ROVER PROTON MG LAND ROVER:200 Coupe,400 Tourer, CDU2160

Brand New DAYCO Timing Belt to fit Proton Wira 2005-2009

Brand New DAYCO Timing Belt to fit Proton Wira 1996-2000

Timing Belt fits PROTON COMPACT C9 1.6 97 to 00 4G92 QH MD176386 Quality New

HI-FLOW THERMOSTAT TT281-180 SUIT LEXUS MITSUBISHI NISSAN PROTON TOYOTA

New ListingENGINE TIMING BELT CAM BELT BOSCH 1 987 948 825 P FOR MITSUBISHI GALANT V,L 400

New ListingProton Satria Phase 1 94-05 Digital Display Clock

Correa Dentada AE TB379 Compatible Con Dayco KTB379 - Mitsubishi/Proton

New DAYCO Timing Belt For Proton Satria 94494

1x Meyle 0500040763 Keilrippenriemen für MITSUBISHI NISSAN ROVER SUZUKI PROTON

NEW V RIBBED BELT SET FOR RENAULT DACIA NISSAN PROTON KANGOO RAPID FC0 1 GATES

Genuine GATES Drive Belt for Mitsubishi Galant 4G37 1.8 Litre (11/1988-10/1992)

V-RIBBED FAN BELT FOR PROTON SATRIA 5PK1113 OEM QUALITY

BOSCH ZAHNRIEMEN STEUERRIEMEN 1 987 949 064 P FÜR HYUNDAI PONY EXCEL,PONY

ZAHNRIEMEN STEUERRIEMEN DAYCO 94195 I FÜR KIA JOICE 2.0 2L 102KW,88KW

ZAHNRIEMEN STEUERRIEMEN CONTITECH CT738 P FÜR PROTON PERSONA 400,WIRA 1.3L,1.5L

Balance Shaft Belt fits MITSUBISHI LANCER 1.8 2.0 2.0D 89 to 08 QH MD19229

5 New

1x Meyle 0500040763 V-Ribbed for Mitsubishi Nissan Rover Suzuki Proton  
ZAHNRIEMEN STEUERRIEMEN GATES 5550XS P FÜR PROTON IMPIAN 1.8 1.8L 93KW  
GATES Drive Belt Kit for Proton Savvy 1149cc 1.2 October 2005 to October 2012

New ListingProton Satria 94-05 Drivers Electric Window Regulator  
TIMING BELT FOR PROTON SATRIA 50092 PREMIUM QUALITY  
Timing Belt fits MITSUBISHI GALANT Mk5 1.8 92 to 96 QH MD176387 MD186376 Quality  
VRIBBED BELT FOR PROTON PERSONA/400/Hatchback/300 WIRA/Sedan/Aeroback SATRIA  
ENGINE TIMING BELT CAM BELT CONTITECH CT1008 A FOR PROTON IMPIAN 1.6 1.6L 76KW

New ListingPROTON GEN-2 MK1 2004-2014 STEERING PUMP 1.6 PETROL  
Proton Jumbuck Persona Gti Satria Engine Mount Slotted Insert Set Upgrade 4G93

New ListingExhaust Front / Down Pipe + Fitting Kit fits PROTON WIRA 1.5 Front 94 to 97 4G15

New ListingIGNITION DISTRIBUTOR CAP BLUE PRINT ADC414217 P FOR PROTON WIRA, PERSONA 400

New ListingPROTON GEN-2 MK1 2004-2014 WIPER LINKAGE PW 851713  
Timing Belt fits CHEVROLET MATIZ M2 1.0 2005 on QH D96610029 96610029 Quality

ZAHNRIEMEN STEUERRIEMEN DAYCO 94216 I NEU OE QUALITÄT  
GOODYEA TIMING BELT FOR HYUNDAI MITSUBISHI PROTON F1038H 94216 CT738  
KEILRIPPENRIEMEN FÜR FIAT MITSUBISHI PROTON GATES 5PK1083  
TIMING BELT FOR PROTON WIRA 50117 PREMIUM QUALITY

Distributor New Proton Persona Wira T2T58272 MD328420  
Brand New DAYCO Timing Belt to fit Proton S16 2009-2022  
ENGINE TIMING BELT CAM BELT GATES 5283XS P NEW OE REPLACEMENT  
5 SPARCO - RACING SPORT MUDFLAPS  
1000B334 FULL GASKET KIT MITSUBISHI 4B11/12 FOR LANCER OUTLANDER 2.0 LTR

In [33]:

```
soup_list = soup.findAll("li", attrs={"class":"s-item s-item__pl-on-bottom"})  
for items in range(len(soup_list)):  
    print(soup_list[items].find("span", attrs={"class":"s-item__price"}).text)
```

\$20.00  
RM 18.00  
RM 410.74  
RM 250.00  
RM 177.72  
RM 201.76  
RM 203.89  
RM 189.83  
RM 191.25  
RM 182.76  
RM 189.00  
RM 283.94  
RM 105.21  
RM 170.84  
RM 662.80  
RM 372.80  
RM 167.48  
RM 645.71  
RM 287.61  
RM 68.13  
RM 732.44  
RM 107.64  
RM 500.22  
RM 195.71  
RM 116.87  
RM 87.76  
RM 211.27  
RM 528.18  
RM 182.71  
RM 117.91  
RM 218.67  
RM 177.72  
RM 68.69  
RM 308.11  
RM 48.48  
RM 415.38  
RM 135.41  
RM 103.67  
RM 121.65  
RM 141.82  
RM 162.19  
RM 94.23  
RM 200.93  
RM 269.13  
RM 497.15  
RM 201.76  
RM 121.11  
RM 165.03  
RM 118.15  
RM 242.41  
RM 237.30  
RM 683.52  
RM 292.19  
RM 189.00  
RM 237.30  
RM 196.59  
RM 137.24  
RM 106.75  
RM 116.61  
RM 159.92  
RM 593.11



RM 329.33  
RM 153.99  
RM 155.00  
RM 228.71

In [54]:

```
# Exercise
# Find the Cheapest Item
import re
soup_list = soup.findAll("li", attrs={"class":"s-item s-item__pl-on-bottom"})

cheapest = []

for items in range(1,len(soup_list)):
    cheapest.append(float(re.sub(r"RM ", '', soup_list[items].find("span", attrs={"class":
#     x = soup_list[items].find("span", attrs={"class":"bold"}).text
#     cheapest.append(re.sub(r'^0-9.', '', x))

print("Cheapest Item is: RM", min(cheapest))

# Should not work, why?
```

Cheapest Item is: RM 18.0

In [61]:

```
import re

input_value="RM 1,000.00"

result = re.sub(r"RM ", "", input_value)

print(result)
```

1,000.00

In [63]:

```
import re

input_value="RM 1,000.00"

result = re.sub(r'^0-9]', '', input_value)

print(result)
```

100000

In [64]:

```
import re

input_value="RM 1,000.00"

result = re.sub(r'^\d-9.', '', input_value)

print(result)
```

1000.00

In [56]:

```
# Exercise
# Find the Cheapest Item
# Use regex to remove the RM Suffix
import re

soup_list = soup.findAll("li", attrs={"class":"s-item s-item__pl-on-bottom"})

cheapest = []

for items in range(1,len(soup_list)):
    cheapest.append(float(re.sub(r"^\d-9.", "", soup_list[items].find("span", attrs={"cla

print(cheapest)

print("The Cheapest is: ", min(cheapest))
```

```
[18.0, 410.74, 250.0, 177.72, 201.76, 203.89, 189.83, 191.25, 182.76, 189.
0, 283.94, 105.21, 170.84, 662.8, 372.8, 167.48, 645.71, 287.61, 68.13, 73
2.44, 107.64, 500.22, 195.71, 116.87, 87.76, 211.27, 528.18, 182.71, 117.9
1, 218.67, 177.72, 68.69, 308.11, 48.48, 415.38, 135.41, 103.67, 121.65, 1
41.82, 162.19, 94.23, 200.93, 269.13, 497.15, 201.76, 121.11, 165.03, 118.
15, 242.41, 237.3, 683.52, 292.19, 189.0, 237.3, 196.59, 137.24, 106.75, 1
16.61, 159.92, 593.11, 329.33, 153.99, 155.0, 228.71]
The Cheapest is: 18.0
```

In [66]:

```
cheapest = [1,2,3,4,5]
min(cheapest)
```

Out[66]:

1

In [57]:

```
soup_list = soup.findAll("li", attrs={"class":"s-item s-item__pl-on-bottom"})
for items in range(len(soup_list)):
    print(soup_list[items].find("div", attrs={"class":"s-item__title"}).text)
```

Shop on eBay

Proton Saga Mitsuboshi CPK865 Original Fan Belt Brand New

4D68 For MITSUBISHI GALANT OR PROTON PERSONA 400 Engine Rebuild Kits Auto Engine

Tail Lamp Proton Perdana V6 RH

New ListingProton Satria Phase 1 94-05 Drivers Manual Door Mirror

New ListingProton Satria 94-05 Passenger Electric Window Regulator

5PK865 GATES V-Ribbed Belt for BMW,BYD,FERRARI,MITSUBISHI,PROTON,TOYOTA,ZHONGHUA

New Listing1 987 949 536 ENGINE TIMING BELT CAM BELT BOSCH NEW OE REPLACEMENT

CT841 CONTITECH TIMING BELT (Mitsubishi, Proton 1.6 92-) NEW O.E SPEC!

New ListingBOSCH ZAHNRIEMEN STEUERRIEMEN 1 987 948 832 P FÜR PROTON SATRIA,PERSONA 400

New ListingENGINE TIMING BELT CAM BELT CONTITECH CT738 A FOR PROTON PERSONA 400,WIRA

New ListingENGINE TIMING BELT CAM BELT CONTITECH CT821 P FOR PROTON PERSONA 400 1.8L 85KW

Keilrippenriemen MAPCO 261675 für AUDI CITROËN FIAT FORD PEUGEOT PROTON RENAULT

Timing Belt fits PROTON SATRIA 1.6 96 to 00 4G92 Contitech MD176386 Quality New

New Genuine DAYCO Timing Belt Camshaft For Proton Persona Satria Wira #94510

DAYCO TIMING BELT KIT for PROTON SUPRIMA 01/2014-on 1.6 4cyl TMPFI TURBO CR IAFM

BOSCH ZAHNRIEMEN STEUERRIEMEN 1 987 949 518 P FÜR PROTON SAVVY 1.2 1.2L 55KW

New DAYCO Timing Belt Kit For Proton M21 KTBA120

GATES K014PK928 V-Ribbed Belt Set for DACIA,NISSAN,PROTON,RENAULT

Courroie Dentée AE TB380 Compatible Avec Dayco KTB380 - Mitsubishi/Proton

GATES Timing Belt/Water Pump Kit for Proton Savvy 1.2 Oct 2005 to Oct 2012

Timing Belt fits PROTON 1.5 1.5 88 to 91 QH MD113564 Genuine Quality Guaranteed

GATES Timing Belt Kit To Suit Proton Persona 316 GLXi Petrol

Dayco Timing Belt T1353 fits MITSUBISHI/ PROTON 94904

ZAHNRIEMEN STEUERRIEMEN BOSCH 1 987 949 064 P NEU OE QUALITÄT

New V-Ribbed Belt for ROVER PROTON MG LAND ROVER:200 Coupe,400 Tourer, CDU 2160

Brand New DAYCO Timing Belt to fit Proton Wira 2005-2009

Brand New DAYCO Timing Belt to fit Proton Wira 1996-2000

Timing Belt fits PROTON COMPACT C9 1.6 97 to 00 4G92 QH MD176386 Quality New

HI-FLOW THERMOSTAT TT281-180 SUIT LEXUS MITSUBISHI NISSAN PROTON TOYOTA

New ListingENGINE TIMING BELT CAM BELT BOSCH 1 987 948 825 P FOR MITSUBISHI GALANT V,L 400

New ListingProton Satria Phase 1 94-05 Digital Display Clock

Correa Dentada AE TB379 Compatible Con Dayco KTB379 - Mitsubishi/Proton

New DAYCO Timing Belt For Proton Satria 94494

1x Meyle 0500040763 Keilrippenriemen für MITSUBISHI NISSAN ROVER SUZUKI PROTON

NEW V RIBBED BELT SET FOR RENAULT DACIA NISSAN PROTON KANGOO RAPID FC0 1 GATES

Genuine GATES Drive Belt for Mitsubishi Galant 4G37 1.8 Litre (11/1988-10/1992)

V-RIBBED FAN BELT FOR PROTON SATRIA 5PK1113 OEM QUALITY

BOSCH ZAHNRIEMEN STEUERRIEMEN 1 987 949 064 P FÜR HYUNDAI PONY EXCEL,PONY

ZAHNRIEMEN STEUERRIEMEN DAYCO 94195 I FÜR KIA JOICE 2.0 2L 102KW,88KW

ZAHNRIEMEN STEUERRIEMEN CONTITECH CT738 P FÜR PROTON PERSONA 400,WIRA 1.3 L,1.5L

Balance Shaft Belt fits MITSUBISHI LANCER 1.8 2.0 2.0D 89 to 08 QH MD19229

5 New

1x Meyle 0500040763 V-Ribbed for Mitsubishi Nissan Rover Suzuki Proton  
ZAHNRIEMEN STEUERRIEMEN GATES 5550XS P FÜR PROTON IMPIAN 1.8 1.8L 93KW  
GATES Drive Belt Kit for Proton Savvy 1149cc 1.2 October 2005 to October 2012

New ListingProton Satria 94-05 Drivers Electric Window Regulator  
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Timing Belt fits MITSUBISHI GALANT Mk5 1.8 92 to 96 QH MD176387 MD186376 Quality  
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New ListingPROTON GEN-2 MK1 2004-2014 STEERING PUMP 1.6 PETROL  
Proton Jumbuck Persona Gti Satria Engine Mount Slotted Insert Set Upgrade 4G93

New ListingExhaust Front / Down Pipe + Fitting Kit fits PROTON WIRA 1.5 Front 94 to 97 4G15

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Timing Belt fits CHEVROLET MATIZ M2 1.0 2005 on QH D96610029 96610029 Quality

ZAHNRIEMEN STEUERRIEMEN DAYCO 94216 I NEU OE QUALITÄT  
GOODYEA TIMING BELT FOR HYUNDAI MITSUBISHI PROTON F1038H 94216 CT738  
KEILRIPPENRIEMEN FÜR FIAT MITSUBISHI PROTON GATES 5PK1083  
TIMING BELT FOR PROTON WIRA 50117 PREMIUM QUALITY

Distributor New Proton Persona Wira T2T58272 MD328420  
Brand New DAYCO Timing Belt to fit Proton S16 2009-2022  
ENGINE TIMING BELT CAM BELT GATES 5283XS P NEW OE REPLACEMENT  
5 SPARCO - RACING SPORT MUDFLAPS  
1000B334 FULL GASKET KIT MITSUBISHI 4B11/12 FOR LANCER OUTLANDER 2.0 LTR

In [59]:

```
soup_list = soup.findAll("li", attrs={"class":"s-item s-item__pl-on-bottom"})

for items in range(1,len(soup_list)):
    print(soup_list[items].find("div", attrs={"class":"s-item__title"}).text)
    print(soup_list[items].find("span", attrs={"class":"s-item__price"}).text)
    print()
```

Proton Saga Mitsuboshi CPK865 Original Fan Belt Brand New  
RM 18.00

4D68 For MITSUBISHI GALANT OR PROTON PERSONA 400 Engine Rebuild Kits Au  
to Engine  
RM 410.74

Tail Lamp Proton Perdana V6 RH  
RM 250.00

New ListingProton Satria Phase 1 94-05 Drivers Manual Door Mirror  
RM 177.72

New ListingProton Satria 94-05 Passenger Electric Window Regulator  
RM 201.76

5PK865 GATES V-Ribbed Belt for BMW,BYD,FERRARI,MITSUBISHI,PROTON,TOYOT  
A,ZHONGHUA  
RM 203.89

## Exercise

Store the results obtained into a Dataframe and save it as CSV file

In [61]:

```
# Column 1 is "Product Name" Column 2 is "Product Price"
import csv

# Create a list to store the data
data = []

for item in range(1, len(soup_list)):
    product_name = soup_list[item].find("div", attrs={"class": "s-item__title"}).text
    product_price = soup_list[item].find("span", attrs={"class": "s-item__price"}).text

    # Append the data as a tuple to the list
    data.append((product_name, product_price))

filename = 'product_data.csv'
with open(filename, 'w', newline='') as file:
    writer = csv.writer(file)
    writer.writerow(['Product Name', 'Product Price'])
    writer.writerows(data)

print("Data saved successfully as", filename)
```

Data saved successfully as product\_data.csv

In [ ]: