```python
'''
Introduction: A PYTHON Program to implement two level crawler for all >>
http or https << links within a particular URL specified by the user uto
2 levels.
This crawler can be extended as according to requirements. This is made
for crawling all unique http or https links because they can be
referred/re-opened for future/multilevel crawling. This crawler will also
keep on posting links to you in case it remains unable to open any link.
'''
#Steps to run the program on any linux based system (like Ubuntu, RedHat
etc.):
'''
1) Open 'Terminal'.
2) Write the following command at terminal window:
     python crawl.py
3) Specify/Give URL you want to crawl to the application program. And
wait a few seconds for Output.
'''
#A single level http links crawler implemented live at
http://www.startlingapps.appspot.com/
#One more crawler which crawls all unique links for its user's queries at
www.bing.com is live at http://www.qbingapp.appspot.com/
'''Starting Code for a two level http or https crawler.'''
#importing modules for URL related operations and parsing the
corresponding html page
import urllib2
from BeautifulSoup import BeautifulSoup
#Variables declaration section
unique=[]
third=[]
#defining a function for crawling a given URL
def crawler(url):
    try:
        var=urllib2.urlopen(url)              #opening URL
        state=var.getcode()                   #getting URL response code
        if state==200:
            html=var.read()              #getting html
            soup=BeautifulSoup(html)     #considering html page for
parsing
            j=soup.findAll('a',href=True)     #parsing for <a> tag
in the html page
            first=[]               #declaring a new list
            for i in j:
                i=i['href']       #changing to 'href' for the page
                ht=i.split(':')        #spliting for checking
whether there is 'http' like link or not
                if ht[0]=="http" or ht[0]=="https":
                    first.append(i)  #appending all http links
to first list
            for i in first:              #checking for do we have
duplicate links in first list
                if i not in unique:
                    unique.append(i)
    except:
```

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            print "\033[1;31m Error: Url '"+ url + "' cannot be
opened.\033[0m"

def main():                      #defining main()
      print
"*********************************************************************
**"
      url=raw_input("Specify URL (For Example:
http://www.startlingapps.appspot.com/):\n")   #getting user input
      crawler(url)                    #crawling the url for the first time
      length=int(len(unique))           #finding the length of unique
list
      third=unique
      print
"*********************************************************************
**"
      print ">>>>>>>>Varoius http or https Links at level-1 only:"
      print
"*********************************************************************
**"
      for i in third:
            print i
      #print length
      print
"*********************************************************************
**"
      print ">>>>>>>>Varoius http or https Links at level-1 and level-2:"
      print
"*********************************************************************
**"
      while(length>0):
            #for crawling at level 2
            length=length-1
            '''print length
            print "\033[1;32m" +third[length]
            print "\033[0m"'''
            crawler(third[length])
      for i in unique:
            print i
      print "\nTotal unique links found:  ",len(unique)
if __name__ == '__main__':        #calling main()
      main()
```