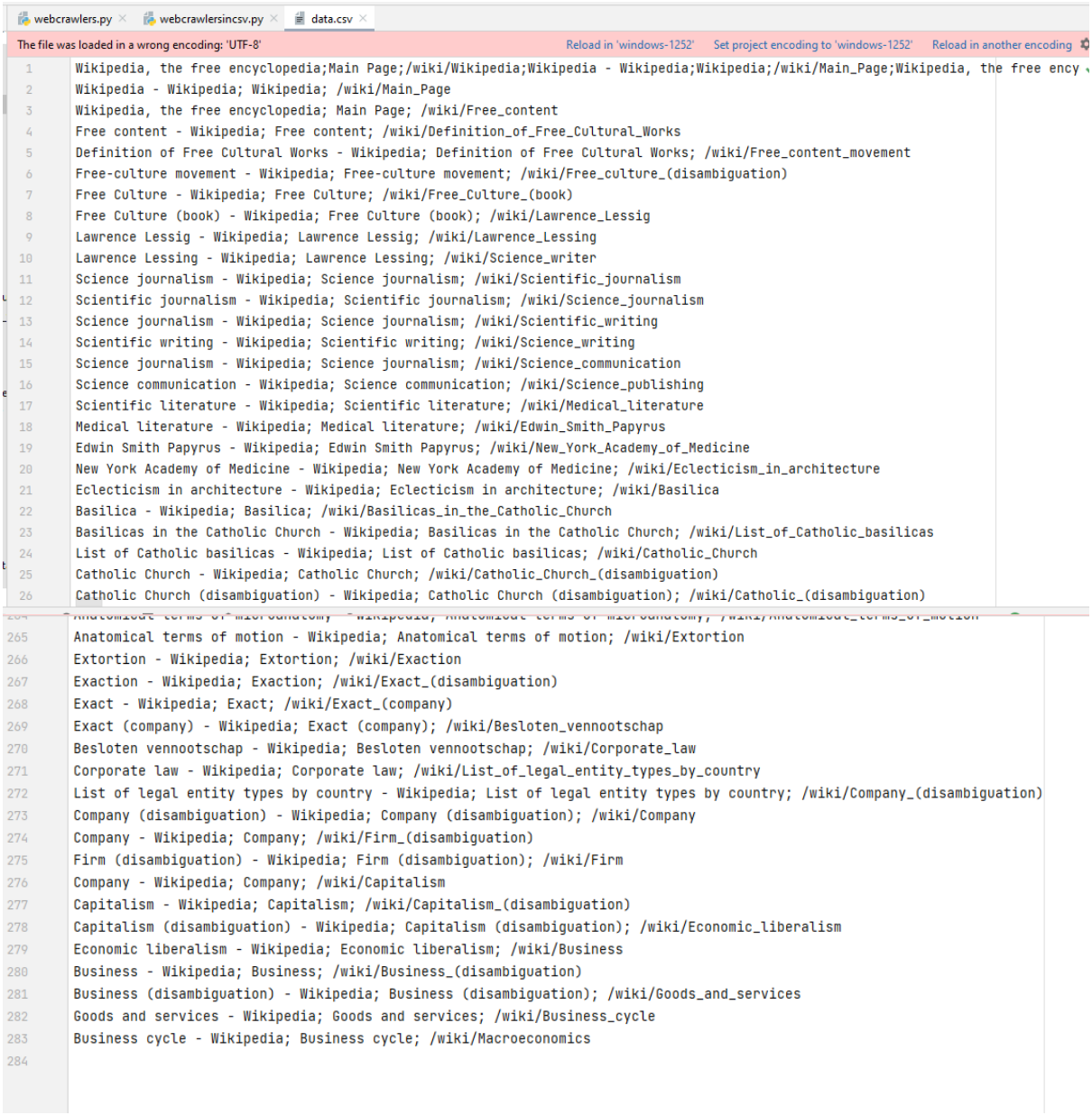
Program no :15

Aim: Implement simple web crawler (importing data to csv file)

Program

```
from bs4 import BeautifulSoup
import requests

pages_crawled = []

def crawler(url):
    page = requests.get(url)
    soup = BeautifulSoup(page.text,'html.parser')
    links = soup.find_all('a')

    for link in links:
        if 'href'  in link.attrs:
            if link['href'].startswith('/wiki') and ':' not in link['href']:
                if link['href'] not in pages_crawled:
                    new_link = f"https://en.wikipedia.org{link['href']}"
                    pages_crawled.append(link['href'])
                    try:
                        with open('data.csv','a') as file:
                            file.write(f'{soup.title.text}; {soup.h1.text}; {link["href"]}\n')
                        crawler(new_link)
                    except:
                     continue

crawler('https://en.wikipedia.org')
crawler()
```

OUTPUT


webcrawlers.py
webcrawlersincsv.py
data.csv
The file was loaded in a wrong encoding: 'UTF-8'
Reload in 'windows-1252'
Set project encoding to 'windows-1252'
Reload in another encoding
1 Wikipedia, the free encyclopedia;Main Page;/wiki/Wikipedia;Wikipedia - Wikipedia;Wikipedia;/wiki/Main_Page;Wikipedia, the free ency
2 Wikipedia - Wikipedia; Wikipedia; /wiki/Main_Page
3 Wikipedia, the free encyclopedia; Main Page; /wiki/Free_content
4 Free content - Wikipedia; Free content; /wiki/Definition_of_Free_Cultural_Works
5 Definition of Free Cultural Works - Wikipedia; Definition of Free Cultural Works; /wiki/Free_content_movement
6 Free-culture movement - Wikipedia; Free-culture movement; /wiki/Free_culture_(disambiguation)
7 Free Culture - Wikipedia; Free Culture; /wiki/Free_Culture_(book)
8 Free Culture (book) - Wikipedia; Free Culture (book); /wiki/Lawrence_Lessig
9 Lawrence Lessig - Wikipedia; Lawrence Lessig; /wiki/Lawrence_Lessing
10 Lawrence Lessing - Wikipedia; Lawrence Lessing; /wiki/Science_writer
11 Science journalism - Wikipedia; Science journalism; /wiki/Scientific_journalism
12 Scientific journalism - Wikipedia; Scientific journalism; /wiki/Science_journalism
13 Science journalism - Wikipedia; Science journalism; /wiki/Scientific_writing
14 Scientific writing - Wikipedia; Scientific writing; /wiki/Science_writing
15 Science journalism - Wikipedia; Science journalism; /wiki/Science_communication
16 Science communication - Wikipedia; Science communication; /wiki/Science_publishing
17 Scientific literature - Wikipedia; Scientific literature; /wiki/Medical_literature
18 Medical literature - Wikipedia; Medical literature; /wiki/Edwin_Smith_Papyrus
19 Edwin Smith Papyrus - Wikipedia; Edwin Smith Papyrus; /wiki/New_York_Academy_of_Medicine
20 New York Academy of Medicine - Wikipedia; New York Academy of Medicine; /wiki/Eclecticism_in_architecture
21 Eclecticism in architecture - Wikipedia; Eclecticism in architecture; /wiki/Basilica
22 Basilica - Wikipedia; Basilica; /wiki/Basilicas_in_the_Catholic_Church
23 Basilicas in the Catholic Church - Wikipedia; Basilicas in the Catholic Church; /wiki/List_of_Catholic_basilicas
24 List of Catholic basilicas - Wikipedia; List of Catholic basilicas; /wiki/Catholic_Church
25 Catholic Church - Wikipedia; Catholic Church; /wiki/Catholic_Church_(disambiguation)
26 Catholic Church (disambiguation) - Wikipedia; Catholic Church (disambiguation); /wiki/Catholic_(disambiguation)
265 Anatomical terms of motion - Wikipedia; Anatomical terms of motion; /wiki/Extortion
266 Extortion - Wikipedia; Extortion; /wiki/Exaction
267 Exaction - Wikipedia; Exaction; /wiki/Exact_(disambiguation)
268 Exact - Wikipedia; Exact; /wiki/Exact_(company)
269 Exact (company) - Wikipedia; Exact (company); /wiki/Besloten_vennootschap
270 Besloten vennootschap - Wikipedia; Besloten vennootschap; /wiki/Corporate_law
271 Corporate law - Wikipedia; Corporate law; /wiki/List_of_legal_entity_types_by_country
272 List of legal entity types by country - Wikipedia; List of legal entity types by country; /wiki/Company_(disambiguation)
273 Company (disambiguation) - Wikipedia; Company (disambiguation); /wiki/Company
274 Company - Wikipedia; Company; /wiki/Firm_(disambiguation)
275 Firm (disambiguation) - Wikipedia; Firm (disambiguation); /wiki/Firm
276 Company - Wikipedia; Company; /wiki/Capitalism
277 Capitalism - Wikipedia; Capitalism; /wiki/Capitalism_(disambiguation)
278 Capitalism (disambiguation) - Wikipedia; Capitalism (disambiguation); /wiki/Economic_liberalism
279 Economic liberalism - Wikipedia; Economic liberalism; /wiki/Business
280 Business - Wikipedia; Business; /wiki/Business_(disambiguation)
281 Business (disambiguation) - Wikipedia; Business (disambiguation); /wiki/Goods_and_services
282 Goods and services - Wikipedia; Goods and services; /wiki/Business_cycle
283 Business cycle - Wikipedia; Business cycle; /wiki/Macroeconomics
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