

## UNIT 4.2

### ASSIGNMENT ON ADVANCE SEARCH ENGINE :

In the session, We are going to build an advanced search engine do that will be building a web search engine. Exploring how to use variables, strings, and some Python built-in functions to work on them to create a web crawler that makes use of those.

#### Program:

```
import requests

from bs4 import BeautifulSoup

def web_crawler(search_term):

    # Replace 'your_search_engine_url' with the actual search engine URL

    search_url = f'https://your_search_engine_url?q={search_term}'

    # Send an HTTP request to the search engine

    response = requests.get(search_url)

    # Check if the request was successful (status code 200)

    if response.status_code == 200:

        # Parse the HTML content of the page

        soup = BeautifulSoup(response.text, 'html.parser')

        # Extract titles of search results

        titles = soup.find_all('h3', class_='result-title')

        # Print the titles

        for index, title in enumerate(titles, start=1):

            print(f'{index}. {title.text}')

    else:

        print(f'Error: {response.status_code}')

# Example usage

search_term = 'python web scraping'

web_crawler(search_term)
```