

Homework 4 – Comparing Search Engine Ranking Algorithms

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Website indexed: Nypost.com

Steps:

Step 1: Basic Solr Installation & Indexing HTML files:

- Installed Apache Solr software from the links provided in the document.
- Started the Solr using bin/solr start
- Created a core myexample using the **command bin/solr create -c myexample**.
- Edited the **managed-schema** file in the **conf** folder as mentioned in the pdf so that all the text content can be mapped properly.
- Indexed the NyPost html pages that are downloaded from the google drive.
- This indexing on the solr that can be seen on the port 8983 localhost:8983/solr/# on the web browser.
- Queried in the Solr Admin page to find the relevant results and to make sure that Solr is working fine.

The screenshot shows the Apache Solr Admin interface at localhost:8983/solr/#/myexample. The left sidebar shows navigation options like Dashboard, Logging, Core Admin, Java Properties, Thread Dump, and a dropdown menu for 'myexample'. The main content area has three tabs: Statistics, Instance, and Replication (Master). The Statistics tab displays metrics such as Last Modified (2 days ago), Num Docs (15403), Max Doc (15403), Heap Memory Usage (-1), Deleted Docs (0), Version (510), Segment Count (18), and Current (✓). The Instance tab shows CWD (/Users/miloni_134/Downloads/solr-7.5.0/server), Instance (/Users/miloni_134/Downloads/solr-7.5.0/server/solr/myexample), Data (/Users/miloni_134/Downloads/solr-7.5.0/server/solr/myexample/data), Index (/Users/miloni_134/Downloads/solr-7.5.0/server/solr/myexample/data/index), and Impl (org.apache.solr.core.NRTCachingDirectoryFactory). The Replication (Master) tab shows a table with columns Version, Gen, and Size. It lists 'Master (Searching)' with Version 1541469526935, Gen 87, and Size 318.6 MB. It also lists 'Master (Replicable)' with Version -, Gen -, and Size -. The bottom right corner includes links to Documentation, Issue Tracker, IRC Channel, Community forum, and Solr Query Syntax.

Step 2: Clone the solr-php-client and make changes in the sample code.

- Cloned the GitHub repository for solr-php-client and made the changes in the sample code for the search engine ranking algorithms.

Step 3: Extracting Edge List using JAVA & Web Graph Construction:

- Downloaded the Jsoup.jar library using the link given in the assignment PDF.
- Wrote a Java code using JSoup library. It created two mapping files(fileUrlMap and urlFileMap using the combined mapping csv file.
- Using this I extracted the outgoing links of each web page by traversing the directory to create the edgeList.txt file.
- This is the web graph or the directed graph which contains web page files as vertices and edge between two indicates a link between them.

Step 4: PageRank Computation:

- Used Networkx graph in the pagerank algorithm that returns the pages with the corresponding page rank score.
- Executed python code to compute the page rank values using the NetworkX library.
- The python file interprets each line from edgeList.txt and computes the page rank values using the following configuration
alpha=0.85, personalization=None, max_iter=30, tol=1e-06, nstart=None, weight='weight', dangling=None.
- In the end, the program creates external_pageRankFile.txt with syntax
<document_id>=<page_rank_score>.

Step 5: Necessary changes after creating external_pageRankFile:

- Placed the external_pageRankFile. in Solr in **solr-7.5.0/server/solr/myexample/data** and made important changes to managed-schema by adding fieldType and field parameters as mentioned in the doc.
- Modified the solrconfig.xml file as per the instructions given in the PDF.
- Reloaded the core on the Solr admin page.

- Queried in Solr Admin Page by placing “pageRankFile desc” in sort parameter.

The screenshot shows the Solr Admin interface with the 'Core Admin' tab selected. Under the 'Core' section, the 'myexample' core is chosen. The 'Index' tab is active, showing the following statistics:

lastModified:	4 days ago
version:	510
numDocs:	15403
maxDoc:	15403
deletedDocs:	0
current:	✓
directory:	org.apache.lucene.store.NRTCachingDirectory@/Users/miloni_134/Downloads/solr-7.5.0/server/solr/myexample/data/index lockFactory=org.apache.lucene.store.NativeFSLockFactory@82e30fd; maxCacheMB=48.0 maxMergeSizeMB=4.0)

At the bottom, there are links to Documentation, Issue Tracker, IRC Channel, Community forum, and Solr Query Syntax.

Step 6: PHP script modification and running the queries

- Modified the PHP code to handle the search with external page rank algorithm.
- This was achieved by adding radio buttons for Solr default configuration and Page rank. For page rank I added additional parameters ‘sort’ => ‘pageRankFile desc’ before sending the query request to Solr.
- Modified the way the results are displayed for each query and displayed the document ID, title, link and description to the actual news article featured on NYPOST.
- After querying, the first 10 results are displayed.

Explanation for higher page rank values

PageRank is a “**vote**”, by all the other pages on the Web, about how important a page is.

A link to a page counts as a vote of support.

If there’s no link there’s no support.

The pages with more number of incoming links(i.e having a higher indegree) especially a page that is linked to by many pages with high PageRank receives a high rank value itself.

Top Ten results produced for both Page rank method and default solr(Lucene) method for all the queries:

1. Donald Trump

Default Solr Method	External Page rank method
https://nypost.com/2018/10/15/donald-and-melania-trump-begin-tour-of-towns-destroyed-by-hurricane-michael/	https://nypost.com/horoscopes/
https://nypost.com/2018/10/15/donald-and-melania-trump-begin-tour-of-towns-destroyed-by-hurricane-michael/	https://nypost.com/columnists/
https://nypost.com/2016/02/15/donald-trump-has-invented-a-new-way-to-win/	https://nypost.com/
https://nypost.com/2016/11/09/	https://nypost.com/2018/10/15/surveillance-video-shows-moment-before-model-shot-in-neck-crashes-car/
https://nypost.com/2017/11/06/how-donald-trump-manipulated-bon-jovi-out-of-bills-purchase/	https://nypost.com/2018/10/15/judge-tosses-stormy-daniels-defamation-suit-against-trump/
https://nypost.com/2018/10/01/donald-trump-pays-tribute-to-friend-david-wright/	https://nypost.com/2018/10/15/angry-about-the-subways-send-cuomo-a-message/
https://nypost.com/2016/05/03/donald-trump-is-the-nominee-cruz-and-kasich-should-drop-out/	https://nypost.com/2018/10/15/why-hillary-clinton-can-never-admit-the-truth-about-bill/
https://nypost.com/2016/11/10/	https://nypost.com/2018/10/15/microsoft-co-founder-paul-allen-dead-at-65/
https://nypost.com/2017/01/20/	https://nypost.com/2018/10/15/buyers-see-bargains-in-oversaturated-luxury-hotel-biz/
https://nypost.com/2016/11/11/	https://nypost.com/2018/10/15/9-year-old-boy-helps-cops-track-down-moms-accused-killer/

2. LA Lakers

Default Solr Method	External Page rank method
https://nypost.com/2018/09/25/lebron-james-knows-it-wont-come-easy-with-lakers/	https://nypost.com/2018/10/15/tom-bradys-postgame-words-to-gronk-are-an-nfl-nightmare/
https://nypost.com/2018/09/07/warriors-star-emerges-as-lakers-flashy-plan-b-in-free-agency/	https://nypost.com/2018/10/15/nfl-flameout-admits-to-having-sex-with-12-year-old-girl-police/
https://nypost.com/2018/10/10/klay-thompson-gushes-over-lebron-as-lakers-pursuit-looms/	https://nypost.com/2018/10/15/eli-manning-trade-could-save-him-and-the-giants-espn-qb/
https://nypost.com/tag/nba/	https://nypost.com/2018/10/14/aaron-hernandez-had-sexual-relationship-with-hs-quarterback/
https://nypost.com/tag/los-angeles-lakers/	https://nypost.com/2018/10/15/mlb-youngsters-bring-the-trash-talk-and-much-needed-fun/
https://nypost.com/2001/02/14/	https://nypost.com/2018/10/15/empty-vows-alderston-back-stab-inside-mets-gm-search-mess/
https://nypost.com/2014/05/02/	https://nypost.com/2018/10/15/a-giants-trade-for-ex-patriots-quarterback-would-make-sense/
https://nypost.com/2012/11/12/	https://nypost.com/2018/10/15/angry-about-the-subways-send-cuomo-a-message/
https://nypost.com/2015/06/26/	https://nypost.com/2018/10/15/red-sox-could-keep-sticking-it-to-yankees-with-zach-britton-swipe/
https://nypost.com/2017/02/21/	https://nypost.com/2018/10/15/knicks-season-preview-what-theyre-really-playing-for/

3. Star Wars

Default Solr Method	External Page rank method
https://nypost.com/2015/12/18/	https://nypost.com/horoscopes/
https://nypost.com/2015/12/15/	https://nypost.com/columnists/
https://nypost.com/2015/12/17/	https://nypost.com/

https://nypost.com/2015/12/16/	https://nypost.com/2018/10/15/nfl-flameout-admits-to-having-sex-with-12-year-old-girl-police/
https://nypost.com/2015/12/22/	https://nypost.com/2018/10/14/aaron-hernandez-had-sexual-relationship-with-hs-quarterback/
https://nypost.com/2015/12/14/	https://nypost.com/2018/10/14/brutal-bias-attack-in-middle-of-brooklyn-street-caught-on-video/
https://nypost.com/2015/11/24/	https://nypost.com/2018/10/15/mlb-youngsters-bring-the-trash-talk-and-much-needed-fun/
https://nypost.com/2015/04/20/	https://nypost.com/horoscope/libra-10-15-2018/
https://nypost.com/2015/10/20/	https://nypost.com/horoscope/gemini-10-15-2018/
https://nypost.com/2015/04/16/	https://nypost.com/horoscope/leo-10-15-2018/

4. Lebron James

Default Solr Method	External Page rank method
https://nypost.com/2018/09/25/lebron-james-knows-it-wont-come-easy-with-lakers/	https://nypost.com/2018/10/15/judge-tosses-stormy-daniels-defamation-suit-against-trump/
https://nypost.com/2018/04/04/lebron-saban-feud-over-shop-talk-show-in-copyright-dispute/	https://nypost.com/2018/10/15/ex-nightlife-king-plans-to-open-a-private-club-in-noho/
https://nypost.com/tag/los-angeles-lakers/	https://nypost.com/2018/10/15/knicks-season-preview-what-theyre-really-playing-for/
https://nypost.com/2010/07/09/	https://nypost.com/2018/10/15/nyc-goes-entire-weekend-without-a-shooting-for-first-time-in-14-years/
https://nypost.com/2018/07/02/	https://nypost.com/2018/10/15/naked-drunk-navy-sailor-causes-chaotic-scene-at-theme-park-police/
https://nypost.com/2018/10/10/klay-thompson-gushes-over-lebron-as-lakers-pursuit-looms/	https://nypost.com/author/jonathon-trugman/
https://nypost.com/2010/07/08/	https://nypost.com/author/mackenzie-dawson/
https://nypost.com/2014/07/11/	https://nypost.com/author/betsy-mccaughey/
https://nypost.com/2010/07/01/	https://nypost.com/author/salena-zito/

https://nypost.com/2010/07/07/	https://nypost.com/2018/10/15/tom-brady-leads-patriots-by-chiefs-in-epic-quarterback-duel/
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5. 2018 World Cup

Default Solr Method	External Page rank method
https://nypost.com/2018/07/12/theres-a-knicks-battle-and-bet-over-the-world-cup-final/	https://nypost.com/privacy/
this-psychic-pig-just-predicted-the-world-cup/">https://nypost.com/video>this-psychic-pig-just-predicted-the-world-cup/	https://nypost.com/contact/
https://nypost.com/2018/06/05/nycfc-cant-wait-to-get-monkey-off-their-back-in-u-s-open-cup/	https://nypost.com/tips/
https://nypost.com/2018/10/04/stricken-ryder-cup-fan-i-thought-id-be-trampled-by-tiger-woods-fans/	https://nypost.com/horoscopes/
https://nypost.com/2018/07/13/son-of-stanley-cup-winning-devil-chasing-nhl-dream/	https://nypost.com/terms/
https://nypost.com/2014/06/12/	https://nypost.com/mobile-apps/
https://nypost.com/2014/06/11/	https://nypost.com/columnists/
https://nypost.com/2018/10/04/capitals-stanley-cup-tribute-was-a-little-bit-petty/	https://nypost.com/rssfeeds/
https://nypost.com/2018/10/02/nhl-preview-these-stanley-cup-contenders-are-racing-the-clock/amp/	https://nypost.com/search/
https://nypost.com/tag/tiger-woods/	https://nypost.com/

6. North Korea

Default Solr Method	External Page rank method
https://nypost.com/2018/08/30/a-glimpse-at-life-inside-north-korea/slide-1/	https://nypost.com/2018/10/15/tom-bradys-postgame-words-to-gronk-are-an-nfl-nightmare/
https://nypost.com/2018/08/24/state-department-reportedly-blindsided-by-trump-canceling-north-korea-trip/	https://nypost.com/2018/10/15/nfl-flameout-admits-to-having-sex-with-12-year-old-girl-police/

https://nypost.com/2018/06/07/former-pow-calls-on-trump-to-reclaim-us-ship-captured-by-north-korea/	https://nypost.com/2018/10/15/eli-manning-trade-could-save-him-and-the-giants-espn-qb/
https://nypost.com/2018/10/07/pompeo-progress-made-with-kim-jong-un-on-north-korea-trip/	https://nypost.com/2018/10/14/aaron-hernandez-had-sexual-relationship-with-hs-quarterback/
https://nypost.com/2018/09/10/north-korea-marks-the-hermit-kingdoms-70th-anniversary/slide-1/	https://nypost.com/2018/10/15/mlb-youngsters-bring-the-trash-talk-and-much-needed-fun/
https://nypost.com/2017/09/09/how-democrats-left-america-naked-before-north-koreas-nukes/	https://nypost.com/2018/10/15/empty-vows-alderson-back-stab-inside-mets-gm-search-mess/
https://nypost.com/2017/09/03/	https://nypost.com/2018/10/15/a-giants-trade-for-ex-patriots-quarterback-would-make-sense/
https://nypost.com/2018/10/02/trumps-love-for-kim-is-undercutting-his-own-teams-necessary-toughness/	https://nypost.com/2018/10/15/the-south-bronx-is-in-the-midst-of-a-development-boom/
https://nypost.com/2017/09/04/	https://nypost.com/2018/10/15/how-eddie-lampert-led-sears-into-bankruptcy-disaster/
https://nypost.com/2018/10/04/north-korean-hackers-linked-to-global-banking-heist/	https://nypost.com/2018/10/15/red-sox-could-keep-sticking-it-to-yankees-with-zach-britton-swipe/

7. Hurricane Florence

Default Solr Method	External Page rank method
https://nypost.com/2018/09/14/hurricane-florence-storms-north-carolina/slide-1/	https://nypost.com/2018/10/15/surveillance-video-shows-moment-before-model-shot-in-neck-crashes-car/
https://nypost.com/2018/09/11/the-carolinas-brace-for-hurricane-florence/slide-1/	https://nypost.com/2018/10/15/ex-nightlife-king-plans-to-open-a-private-club-in-noho/
https://nypost.com/2018/09/13/hurricane-florence-closes-in-on-carolina-coast/	https://nypost.com/2018/10/15/trumps-bizarre-white-house-painting-revealed/
https://nypost.com/2018/09/10/hurricane-florence-looks-wild-from-the-international-space-station/	https://nypost.com/2018/10/15/naked-drunk-navy-sailor-causes-chaotic-scene-at-theme-park-police/

https://nypost.com/2018/09/20/unc-football-players-lend-hand-to-hurricane-florence-victims/	https://nypost.com/2018/10/15/sears-death-of-an-american-icon/slides-1/
https://nypost.com/2018/09/14/astronaut-snaps-picture-of-hurricane-florence-as-it-makes-landfall/	https://nypost.com/2018/10/15/heres-what-elizabeth-warrens-dna-test-shows/
https://nypost.com/2018/09/15/kitten-named-survivor-rescued-with-owner-from-hurricane-florence/	https://nypost.com/tag/georgia/
https://nypost.com/2018/09/24/hurricane-florence-isnt-done-with-the-carolinas-just-yet/	https://nypost.com/tag/donald-trump/
https://nypost.com/2018/09/19/north-carolina-hog-lagoons-are-exploding-poo-after-hurricane-florence/	https://nypost.com/author/fox-news/
https://nypost.com/tag/hurricanes/page/2/	https://nypost.com/author/reuven-fenton/

8. Paul Allen

Default Solr Method	External Page rank method
https://nypost.com/2018/10/15/microsoft-co-founder-paul-allen-dead-at-65/	https://nypost.com/columnists/
https://nypost.com/2018/10/15/microsoft-co-founder-paul-allen-dead-at-65/	https://nypost.com/
https://nypost.com/2018/10/15/microsoft-co-founder-paul-allen-dead-at-65/	https://nypost.com/2018/10/15/a-giants-trade-for-ex-patriots-quarterback-would-make-sense/
https://nypost.com/tag/paul-allen/	https://nypost.com/2018/10/15/microsoft-co-founder-paul-allen-dead-at-65/
https://nypost.com/2018/03/06/microsoft-co-founder-finds-long-lost-wwii-aircraft-carrier/amp/	https://nypost.com/2018/10/15/red-sox-could-keep-sticking-it-to-yankees-with-zach-britton-swipe/
https://nypost.com/author/carleton-english/	https://nypost.com/author/paul-schwartz/
https://nypost.com/tech/page/3/	https://nypost.com/2018/10/15/knicks-season-preview-what-theyre-really-playing-for/

https://nypost.com/tech/page/2/	https://nypost.com/2018/10/15/kirk-cousins-money-grab-may-have-gifted-jets-a-franchise-qb/
https://nypost.com/tech/	https://nypost.com/author/brian-lewis/
https://nypost.com/2018/03/06/microsoft-co-founder-finds-long-lost-wwii-aircraft-carrier/	https://nypost.com/2018/10/15/de-blasios-nycha-strategy-was-deceptive-from-the-start/

Screenshots that describing the flow:

1. Initial Page

A screenshot of a web browser window. The address bar shows the URL `localhost/myscript.php?q=&sort=solr`. The page content is a search form with a search input field labeled "Search:" and a dropdown menu for sorting. The dropdown menu has two options: "Solr Default(LUCENE)" (selected) and "External PageRank". A "Submit" button is located below the dropdown.

2. Solr Method Results:

Search: Donald Trump

Solr Default(LUCENE)
 External PageRank

Submit

Total number of Results: 8041
Results showing 1 - 10 of 8041:

1. ID: /Users/miloni_134/Downloads/nypost/3ebce63e-fba7-403d-b0b8-50fdb9e67b4.html
TITLE: Donald and Melania Trump tour towns destroyed by Hurricane Michael
URL: [https://nypost.com/2018/10/15/donald-and-melania-trump-begin-tour-of-towns-destroyed-by-hurricane-michael/amp/](https://nypost.com/2018/10/15/donald-and-melania-trump-begin-tour-of-towns-destroyed-by-hurricane-michael/)
DESCRIPTION: President Trump got a firsthand look at the path of destruction Hurricane Michael carved out along the Florida Panhandle and Georgia during a day of aerial tours Monday. In Marine One, Trump, accom...
2. ID: /Users/miloni_134/Downloads/nypost/b02d11fc-24b7-4eab-917d-83905c542d1e.html
TITLE: Donald and Melania Trump tour towns destroyed by Hurricane Michael
URL: <https://nypost.com/2018/10/15/donald-and-melania-trump-begin-tour-of-towns-destroyed-by-hurricane-michael/>
DESCRIPTION: President Trump got a firsthand look at the path of destruction Hurricane Michael carved out along the Florida Panhandle and Georgia during a day of aerial tours Monday. In Marine One, Trump, accom...
3. ID: /Users/miloni_134/Downloads/nypost/51f46b36-0e7b-4d6a-837d-938d9587b16e.html
TITLE: Donald Trump has invented a new way to win
URL: <https://nypost.com/2016/02/15/donald-trump-has-invented-a-new-way-to-win/>
DESCRIPTION: The other GOP candidates are finally starting to fight on Donald Trump's terms, to judge by the slugfest that was Saturday night's debate. But it speaks volumes — whole encyclopedias — about the ig...
4. ID: /Users/miloni_134/Downloads/nypost/1e666eac-ab65-4885-869e-3d057deeb87c.html
TITLE: November 9, 2016 | New York Post
URL: <https://nypost.com/2016/11/09/>
DESCRIPTION: N/A
5. ID: /Users/miloni_134/Downloads/nypost/4882c3e5-f749-4528-8082-8df47c4c48e5.html
TITLE: How Donald Trump manipulated Bon Jovi out of Bills purchase
URL: <https://nypost.com/2017/11/06/how-donald-trump-manipulated-bon-jovi-out-of-bills-purchase/>
DESCRIPTION: BUFFALO — Was Donald Trump the secret force behind the seemingly grassroots 2014 campaign to block Jon Bon Jovi from buying the NFL's Buffalo Bills? That's what those involved are sayin...
6. ID: /Users/miloni_134/Downloads/nypost/05473ac2-f9ed-4a02-888b-7ce35ac52868.html
TITLE: President Trump pays tribute to Met's great David Wright
URL: <https://nypost.com/2018/10/01/donald-trump-pays-tribute-to-friend-david-wright/>
DESCRIPTION: Everyone loves David Wright. The president of the United States is apparently part of that not-so-exclusive group. President Trump made a video congratulating Wright on his career that Wright's age...
7. ID: /Users/miloni_134/Downloads/nypost/9e047f06-6dbc-4081-827e-4f836023df50.html
TITLE: With Trump's win, it's time for GOP to unite against Hillary
URL: <https://nypost.com/2016/05/03/donald-trump-is-the-nominee-cruz-and-kasich-should-drop-out/>
DESCRIPTION: Ted Cruz did the right and honorable thing by suspending his presidential campaign Tuesday night. John Kasich should follow suit. It's time for the party to unite against Hillary Clinton. Donald Tr...
8. ID: /Users/miloni_134/Downloads/nypost/be115371-1223-4866-ba39-e5668c9b6456.html
TITLE: November 10, 2016 | New York Post
URL: <https://nypost.com/2016/11/10/>
DESCRIPTION: N/A
9. ID: /Users/miloni_134/Downloads/nypost/bd1848eb-fd9e-4ff8-88f2-cdd4ff166856.html
TITLE: January 20, 2017 | New York Post
URL: <https://nypost.com/2017/01/20/>
DESCRIPTION: N/A
10. ID: /Users/miloni_134/Downloads/nypost/ae6b0482-148d-46ef-b070-1c520f1bd5a6.html
TITLE: November 11, 2016 | New York Post
URL: <https://nypost.com/2016/11/11/>
DESCRIPTION: N/A

3. Actual webpage that opens when clicking on one of the Solr result's :

← → 🔒 https://nypost.com/2018/10/15/donald-and-melania-trump-begin-tour-of-towns-destroyed-by-hurricane-michael/amp/ ⭐ ⓘ | M ⓘ

≡ **NEW YORK POST**

NEWS

Donald and Melania Trump tour towns destroyed by Hurricane Michael

By [Lia Eustachewich](#)
October 15, 2018 | 1:06pm



Betterment ✓ SMART & SECURE ➔

4. External Page Rank Method Results:

Search: Donald Trump

Solr Default(LUCENE)
 External PageRank

Submit

Total number of Results: 8041
Results showing 1 - 10 of 8041:

1. ID: /Users/miloni_134/Downloads/nypost/e8940ca0-f7c-4925-aaab-47e9f260d0c1.html
TITLE: Daily Horoscope | New York Post
URL: <https://nypost.com/horoscopes/>
DESCRIPTION: N/A

2. ID: /Users/miloni_134/Downloads/nypost/fc17eac6-ad31-4c0c-b079-3bebbc17fc9.html
TITLE: Columnists | New York Post
URL: <https://nypost.com/columnists/>
DESCRIPTION: Visit the post for more.

3. ID: /Users/miloni_134/Downloads/nypost/dc52408d-235a-4535-a9bd-4b08b1c777b0.html
TITLE: New York Post
URL: <https://nypost.com/>
DESCRIPTION: Your source for breaking news, news about New York, sports, business, entertainment, opinion, real estate, culture, fashion, and more.

4. ID: /Users/miloni_134/Downloads/nypost/9af7d0ce-ca79-476c-a348-551c7ebe79b.html
TITLE: Surveillance video shows moment before model shot in neck, crashes car
URL: <https://nypost.com/2018/10/15/surveillance-video-shows-moment-before-model-shot-in-neck-crashes-car/>
DESCRIPTION: Authorities released surveillance video of the scene just seconds before a Georgia model crashed her car after being shot in the neck, hoping witnesses will come forward to identify the mystery shooter.

5. ID: /Users/miloni_134/Downloads/nypost/6cf8280-4576-4ac1-9fb4-4291561097d9.html
TITLE: Judge tosses Stormy Daniels' defamation lawsuit against Donald Trump
URL: <https://nypost.com/2018/10/15/judge-tosses-stormy-daniels-defamation-suit-against-trump/>
DESCRIPTION: Stormy Daniels' defamation lawsuit against President Trump was tossed out Monday — with a federal judge ordering the porn star to pay the president's legal fees, according to court records. The case...

6. ID: /Users/miloni_134/Downloads/nypost/bf89ebee-3c4f-40cb-9cb7-19f7d2b3514.html
TITLE: Angry about the subways? Send Andrew Cuomo a message
URL: <https://nypost.com/2018/10/15/angry-about-the-subways-send-cuomo-a-message/>
DESCRIPTION: Are you happy with Gov. Andrew Cuomo's stewardship of the subways? More than a year after the state-run Metropolitan Transportation Authority launched its emergency Subway Action Plan, and nearly ...

7. ID: /Users/miloni_134/Downloads/nypost/68954782-36a7-485f-a194-d01fce895ce.html
TITLE: Why Hillary Clinton can never admit the truth about Bill
URL: <https://nypost.com/2018/10/15/why-hillary-clinton-can-never-admit-the-truth-about-bill/>
DESCRIPTION: Hillary Clinton won the political battle over Bill Clinton's sexual misadventures in the 1990s, at the cost of having to litigate them forevermore. In the era of #MeToo, her defenses and rationalizations...

8. ID: /Users/miloni_134/Downloads/nypost/d6304d6f-4f59-4993-a533-c223b0d6be02.html
TITLE: Microsoft co-founder, Seahawks and Blazers owner Paul Allen dead at 65
URL: <https://nypost.com/2018/10/15/microsoft-co-founder-paul-allen-dead-at-65/>
DESCRIPTION: The tech world has lost a visionary. Paul Allen, co-founder of Microsoft, died Monday following complications from non-Hodgkin's lymphoma. He was 65. Earlier this month Allen disclosed on his website ...

9. ID: /Users/miloni_134/Downloads/nypost/00618b4d-5685-437d-89e0-5c25b2e3c12.html
TITLE: Buyers see bargains in oversaturated luxury hotel business
URL: <https://nypost.com/2018/10/15/buyers-see-bargains-in-oversaturated-luxury-hotel-biz/>
DESCRIPTION: New York City's hotel-building boom has led to an oversupply of rooms — and enticing deals for aggressive acquirers who believe prices have finally hit a bottom. Developer Rotem Rosen, who brought ...

10. ID: /Users/miloni_134/Downloads/nypost/fc9ef27e-bb3e-41a0-9fe2-4c179359c636.html
TITLE: 9-year-old boy helps cops track down mom's accused killer
URL: <https://nypost.com/2018/10/15/9-year-old-boy-helps-cops-track-down-moms-accused-killer/>
DESCRIPTION: A 9-year-old Georgia boy who witnessed his mother's murder helped cops identify the shooter and land him behind bars, authorities said. Darius Deandre Evans, of Lake City, was arrested in Lov...

5. Actual webpage that opens when clicking on one of the External page rank result's :

← → ✎ https://nypost.com/2018/10/15/judge-tosses-stormy-daniels-defamation-suit-against-trump/ ⌂



NEWS

Judge tosses Stormy Daniels' defamation suit against Trump

By Tamar Lapin October 15, 2018 | 7:07pm | Updated



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#	Query	No. of Overlaps
1	Donald Trump	0
2	LA Lakers	0
3	Star Wars	0
4	Lebron James	0
5	2018 World Cup	0
6	North Korea	0
7	Hurricane Florence	0
8	Paul Allen	1

NO. OF OVERLAPS

