

### Information Need 1

- a. Rock of Ages musical future tickets
- b. Google, Bing
- c. The number of duplicates removed when results were pooled: 2
- d. The final pool size after duplicates are removed: 14
- e. The total number of relevant results: 9
- f.

Number	Result URL	Is it relevant?	Relevance : why?
1	<a href="https://rockofagesmusical.com/">https://rockofagesmusical.com/</a>	yes	It has direct links to buy tickets of 2021 for the musical.
2	<a href="https://rockofagesmusical.com/tickets/">https://rockofagesmusical.com/tickets/</a>	yes	It has the same link of the url to buy tickets above.
3	<a href="https://www.telecharge.com/Off-Broadway/Rock-of-Ages/Overview">https://www.telecharge.com/Off-Broadway/Rock-of-Ages/Overview</a>	no	It lists the past musicals in 2019, not 2021.
4	<a href="https://www.stubhub.com/rock-of-ages-at-lanta-tickets/performer/100282433/">https://www.stubhub.com/rock-of-ages-at-lanta-tickets/performer/100282433/</a>	no	It only provides information about the musical in Atlanta without links to buy tickets.
5	<a href="https://www.ticketmaster.com/rock-of-ages">https://www.ticketmaster.com/rock-of-ages</a>	yes	It provides a search engine that lists and enables filtering of all tickets of the musical in 2021.
6	<a href="https://www.headout.com/broadway/rock-of-ages-e-10604/">https://www.headout.com/broadway/rock-of-ages-e-10604/</a>	no	It only have information and comments about the musical.
7	<a href="http://www.musicaltheatrenews.com/rock-of-ages-tour.html">http://www.musicaltheatrenews.com/rock-of-ages-tour.html</a>	yes	It lists information about the future musical show and links to buy tickets of 2021.
8	<a href="https://www.stereoboard.com/rock-of-ages-tickets/new-york">https://www.stereoboard.com/rock-of-ages-tickets/new-york</a>	no	It mainly has information on the accommodation where the musical is held, not the musical tickets to buy.

9	<a href="https://www.ticketmaster.com/rock-of-age-s-touring-tickets/artist/1291934">https://www.ticketmaster.com/rock-of-age-s-touring-tickets/artist/1291934</a>	yes	Provides information and a direct platform to book tickets for the 2021 musical.
10	<a href="https://www.ticketnetwork.com/performers/rock-of-ages-tickets">https://www.ticketnetwork.com/performers/rock-of-ages-tickets</a>	yes	It offers tickets for the musical in the US. We can directly book tickets here.
11	<a href="https://www.cheapoticketing.com/performers/rock-of-ages">https://www.cheapoticketing.com/performers/rock-of-ages</a>	yes	It offers tours, schedules, and tickets for the musical in US. We can directly book tickets here.
12	<a href="https://www.stubhub.com/rock-of-ages-tickets/grouping/377745/">https://www.stubhub.com/rock-of-ages-tickets/grouping/377745/</a>	yes	Provides information and a direct platform to book tickets for the 2021 musical.
13	<a href="https://www.tickets4musical.com/rock-of-ages-tickets">https://www.tickets4musical.com/rock-of-ages-tickets</a>	yes	Provides a link to book tickets for the 2021 musical.
14	<a href="https://www.rockofageshollywood.com/">https://www.rockofageshollywood.com/</a>	no	Only dead links to book tickets.

g.

Metric	Search Engine 1 = Google	Search Engine 2 = Bing
Precision at rank 5	0.4	0.8
Precision at rank 8	0.375	0.75
Precision at rank 12	0.25	0.5
Average Precision at rank 8 (calculating only the relevant)	0.6095238095238095	0.9150793650793649

## Information Need 2

- colored contact lenses wear clean
- Google, Bing
- The number of duplicates removed when results were pooled: 0
- The final pool size after duplicates are removed: 16

- e. The total number of relevant results: 7  
f.

Number	Result URL	Is it relevant?	Relevance : why?
1	<a href="https://www.everydayhealth.com/skin-beauty/colored-contact-lenses.aspx#:~:text=Even%20if%20you%20don't,24%20hours%20before%20wearing%20them.">https://www.everydayhealth.com/skin-beauty/colored-contact-lenses.aspx#:~:text=Even%20if%20you%20don't,24%20hours%20before%20wearing%20them.</a>	yes	Detailed instructions on how to wear, clean and wash colored contact lenses
2	<a href="https://www.streetdirectory.com/travel_guide/26309/health/how_to_care_for_colored_contact_lenses.html">https://www.streetdirectory.com/travel_guide/26309/health/how_to_care_for_colored_contact_lenses.html</a>	yes	Different suggestions for different types of lenses including colored contact lenses.
3	<a href="https://www.nvisioncenters.com/contacts/colored-contact-risks/">https://www.nvisioncenters.com/contacts/colored-contact-risks/</a>	no	Mainly about eye infections and possible hazards of colored contact lenses, lack suggestion for wearing and cleaning.
4	<a href="https://honeycolor.com/help/lens-care-tips">https://honeycolor.com/help/lens-care-tips</a>	no	Only instructions for wearing contact lenses not colored contact lenses.
5	<a href="https://chiaralens.com/en/blog/how-to-take-care-of-colored-contact-lenses/">https://chiaralens.com/en/blog/how-to-take-care-of-colored-contact-lenses/</a>	yes	Specified tips for taking care of colored contact lenses.
6	<a href="https://www.cdc.gov/contactlenses/decorative-contacts.html">https://www.cdc.gov/contactlenses/decorative-contacts.html</a>	yes	Suggestions for cleaning all types of lenses including colored contact lenses.
7	<a href="https://www.lens.me/blog/how-long-can-you-wear-clear-or-colored-contact-lenses-for">https://www.lens.me/blog/how-long-can-you-wear-clear-or-colored-contact-lenses-for</a>	yes	Tips for wearing steps of colored contact lenses.

8	<a href="https://www.1800contacts.com/eyesociety/colored-contact-lenses/">https://www.1800contacts.com/eyesociety/colored-contact-lenses/</a>	yes	Detailed tips for both wearing and cleaning colored contact lenses.
9	<a href="https://www.allaboutvision.com/contacts/colored-contacts-astigmatism/">https://www.allaboutvision.com/contacts/colored-contacts-astigmatism/</a>	yes	Professional tips from doctors to wear and clean colored contact lenses.
10	<a href="https://www.refinery29.com/en-us/colored-contacts-safety">https://www.refinery29.com/en-us/colored-contacts-safety</a>	no	Mainly talk about how to choose colored contact lenses for festivals, lack information about wearing and cleaning suggestions.
11	<a href="https://www.perfectlensworld.com/articles/clean-contact-lenses-properly">https://www.perfectlensworld.com/articles/clean-contact-lenses-properly</a>	no	Only about contact lenses not colored ones.
12	<a href="https://www.wikihow.com/Clean-Contact-Lenses">https://www.wikihow.com/Clean-Contact-Lenses</a>	no	Only about cleaning contact lenses not colored ones.
13	<a href="https://www.youtube.com/watch?v=w4ad2YQOxRU">https://www.youtube.com/watch?v=w4ad2YQOxRU</a>	no	Video about cleaning contact lenses not colored ones.
14	<a href="https://www.verywellhealth.com/best-contact-lens-solutions-4580534">https://www.verywellhealth.com/best-contact-lens-solutions-4580534</a>	no	Only about contact lenses not colored ones.
15	<a href="https://eyecandys.com/">https://eyecandys.com/</a>	no	Totally an ecommerce website for selling colored contact lenses, no suggestions for wearing or cleaning.
16	<a href="https://www.freshlookcontacts.com/">https://www.freshlookcontacts.com/</a>	no	Totally an ecommerce website for selling colored contact lenses, no suggestions for wearing or cleaning.

Metric	Search Engine 1 = Google	Search Engine 2 = Bing
Precision at rank 5	0.6	0.2
Precision at rank 8	0.75	0.125
Precision at rank 12	0.5	0.08333333333333333
Average Precision at rank 8 (calculating only the relevant)	0.7884920634920635	1.0

### Information Need 3

- best Italian wine how choose
- Google, Bing
- The number of duplicates removed when results were pooled: 3
- The final pool size after duplicates are removed: 13
- The total number of relevant results: 12  
(There is one result duplicated but shares same rank location 6 in both Google and Bing: <https://www.winemag.com/2019/06/18/a-beginners-guide-to-italian-wine/>)
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Number	Result URL	Is it relevant?	Relevance : why?
1	<a href="https://www.thespruceeats.com/top-italian-wines-to-try-3511441">https://www.thespruceeats.com/top-italian-wines-to-try-3511441</a>	yes	Lists top brands of Italian wine.
2	<a href="https://www.delish.com/entertaining/wine/advice/g2445/italian-wine-guide/">https://www.delish.com/entertaining/wine/advice/g2445/italian-wine-guide/</a>	no	Only some weird links to urls mainly about wine in other countries and an advertisement for wine tasting classes, no details about how to choose the best Italian wines.
3	<a href="https://winefolly.com/deep-dive/italian-red-wines/">https://winefolly.com/deep-dive/italian-red-wines/</a>	yes	Detailed guides for choosing best Italian wines and brands.
4	<a href="https://www.independent.wine/2020/02/19/italian-red-wine-a-complete-guide-to-finding-your-favourite/">https://www.independent.wine/2020/02/19/italian-red-wine-a-complete-guide-to-finding-your-favourite/</a>	yes	A complete guide to teach people how to choose Italian wines.

5	<a href="https://www.independent.wine/2020/04/07/the-ultimate-guide-to-the-best-italian-wine/">https://www.independent.wine/2020/04/07/the-ultimate-guide-to-the-best-italian-wine/</a>	yes	A complete guide to choose the best Italian wines with maps and tasting notes.
6	<a href="https://www.winemag.com/2019/06/18/a-beginners-guide-to-italian-wine/">https://www.winemag.com/2019/06/18/a-beginners-guide-to-italian-wine/</a>	yes	Guide for beginners to choose best Italian wines based on their labels and countries of origin.
7	<a href="https://wine.lovetoknow.com/wiki/Best_Italian_Wines">https://wine.lovetoknow.com/wiki/Best_Italian_Wines</a>	yes	Detailed tips to choose best Italian wines based on brands and countries of origin.
8	<a href="https://www.winescrolarguild.org/blog/top-ten-italian-red-wines-beginner-guide.html">https://www.winescrolarguild.org/blog/top-ten-italian-red-wines-beginner-guide.html</a>	yes	Provides ten best Italian wines for beginners.
9	<a href="https://www.reversewinesnob.com/search/label/italy/">https://www.reversewinesnob.com/search/label/italy/</a>	no	It is actually a wine brand's website to introduce their products.
10	<a href="https://italianrestaurant.webagency22.com/how-to-choose-an-italian-wine/">https://italianrestaurant.webagency22.com/how-to-choose-an-italian-wine/</a>	yes	Good article including detailed steps to choose best Italian wines with illustration.
11	<a href="https://wineindustryadvisor.com/2019/12/11/wine-spectators-selection-of-best-italian-wine-producers">https://wineindustryadvisor.com/2019/12/11/wine-spectators-selection-of-best-italian-wine-producers</a>	yes	Recommendations of Italian wine from wine Spectators.
12	<a href="https://blog.vinfolio.com/2018/03/28/the-best-italian-wine-producers-to-add-to-your-collection/">https://blog.vinfolio.com/2018/03/28/the-best-italian-wine-producers-to-add-to-your-collection/</a>	yes	Introduce top Italian wine producers and their brands.
13	<a href="https://www.forbes.">https://www.forbes.</a>	yes	Recommends Best

	<a href="http://com/sites/tomhyla/nd/2018/12/21/best-italian-wines-of-the-year/?sh=42e6b1af33d6">com/sites/tomhyla/nd/2018/12/21/best-italian-wines-of-the-year/?sh=42e6b1af33d6</a>		Italian Wines of different types with details.
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Metric	Search Engine 1 = Google	Search Engine 2 = Bing
Precision at rank 5	0.8	0.4
Precision at rank 8	0.875	0.625
Precision at rank 12	0.5833333333333334	0.4166666666666667
Average Precision at rank 8 (calculating only the relevant)	0.8260204081632653	0.4692857142857143