

# Practica2

2023-04-21

## Pregunta 1

1. Descargar la página web de la URL indicada, y almacenarlo en un formato de R apto para ser tratado.

### Resolución:

Se utiliza la función **htmlParse()** para procesar el contenido de la url <https://www.mediawiki.org/wiki/MediaWiki>. La resolución se encuentra en el siguiente código.

```
# Almacenando la URL
html <- GET("https://www.mediawiki.org/wiki/MediaWiki")
# Descargando contenido de la página web
contenido <- content(html, as = "text")
# Analizando el contenido de la página web
parsedHtml <- htmlParse(contenido, asText = TRUE)
```

2. Analizar el contenido de la web, buscando el título de la página (que en HTML se etiqueta como "title").

### Resolución:

El título de la web, se ubica con la función **xpathSApply()** que nos ayuda a extraer la información. Esta función tiene la variable **xpath** que selecciona todos los elementos "title" y el parámetro **xmlValue** brinda el valor del elemento "title". El resultado es **MediaWiki** y todo lo mencionado se realizó con el siguiente código.

```
# Obteniendo el título de la web
xpath <- "//title"
# Utilizando la función: xpathSApply()
titulos <- xpathSApply(parsedHtml, xpath, xmlValue)
# Se muestra el Título de la Página Web
cat("Título de la Página Web:\n")
```

```
## Título de la Página Web:
```

```
cat(titulos, sep = "\n")
```

```
## MediaWiki
```

3. Analizar el contenido de la web, buscando todos los enlaces (que en HTML se etiquetan como "a"), buscando el texto del enlace, así como la URL.

## Resolución:

Para obtener la url y el texto de la etiqueta , se utilizó la función **xpathSApply()** para extraer la información, donde se utiliza el parámetro **xmlValue** para extraer el texto de la etiqueta y el parámetro **xmlGetAttr** para obtener la url de la etiqueta.

Por otro lado, se realiza las validaciones si en caso hubiese valores null para incorporar el valor NA a través de la función **sapply()**. Luego como los elementos se encuentran en una lista se procede a convertirlos a vector con la función **unlist()** para realizar manipulaciones posteriormente. También, se valido que existen algunos textos de la etiqueta que tienen al principio un espacio y son iguales a otras que no lo tienen, se realizó la eliminación del espacio con la función **str\_replace()**.

Finalmente se crea una tabla con los textos (columna Text) y urls (columna Url) de la etiqueta con la función **data.frame()**, esta se guarda en la variable **links\_tables**.

A continuación se muestra el código con el cual se realizó lo mencionado.

```
# Extrayendo los nombres de la etiqueta <a></a>
name_hyperlink <- xpathSApply(parsedHtml, "//a", xmlValue)
#name_hyperlink
# Extrayendo los valores del atributo href de la etiqueta <a></a>
url_hyperlink <- xpathSApply(parsedHtml, "//a", xmlGetAttr, "href")

# Validando si los nombres de la etiqueta tienen valores null
null_name <- sapply(name_hyperlink, is.null)
# Validando si los valores del atributo href tienen valores null
null_href <- sapply(url_hyperlink, is.null)
# Reemplazando los valores null por el valor NA
name_hyperlink[null_name] <- NA
url_hyperlink[null_href] <- NA
# Convirtiendo de lista a vector los nombres y el valor del href de la etiqueta <a></a>
name_hyperlink <- unlist(name_hyperlink)
url_hyperlink <- unlist(url_hyperlink)

# Se valida que hay texto que tiene al principio espacios pero son iguales
# Se realiza la eliminación de los espacios al inicio
name_hyperlink <- str_replace(name_hyperlink, "^\\s+", "")

# Creando una tabla con el texto y su respectivo url del enlace
links_tables <- data.frame(Text = name_hyperlink, Url = url_hyperlink) %>% arrange(Text)
# Visualización de la tabla en el archivo pdf
kable(links_tables)
```

Text	Url
	/wiki/MediaWiki
	/wiki/File:Wikimedia_Hackathon_Prague_2019_-_Group_Photo_-_CLK_-_cropped.jpg
	/wiki/Professional_development_and_consulting
	/wiki/Help:Navigation
	/wiki/Help:Editing_pages
	/wiki/Help:Contents
	/wiki/How_to_report_a_bug
	/wiki/Project:Language_policy
	https://wikimediafoundation.org/

Text	Url
@mediawiki@wikis.world	<a href="https://www.mediawiki.org/">https://www.mediawiki.org/</a>
About MediaWiki.org	<a href="https://wikis.world/@mediawiki/wiki/Project:About">https://wikis.world/@mediawiki/wiki/Project:About</a>
Afrikaans	<a href="https://www.mediawiki.org/wiki/Template:Main_page/af">https://www.mediawiki.org/wiki/Template:Main_page/af</a>
Bahasa Indonesia	<a href="https://www.mediawiki.org/wiki/Template:Main_page/id">https://www.mediawiki.org/wiki/Template:Main_page/id</a>
Bahasa Melayu	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ms">https://www.mediawiki.org/wiki/Template:Main_page/ms</a>
Cite this page	<a href="https://www.mediawiki.org/w/index.php?title=Special:CiteThisPage&amp;page=MediaWiki&amp;id=3878227&amp;wpForm">/w/index.php?title=Special:CiteThisPage&amp;page=MediaWiki&amp;id=3878227&amp;wpForm</a>
Code of Conduct	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Code_of_Conduct">https://www.mediawiki.org/wiki/Special:MyLanguage/Code_of_Conduct</a>
Code statistics	<a href="https://www.mediawiki.org/wiki/Development_statistics">/wiki/Development_statistics</a>
Communication	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Communication">/wiki/Special:MyLanguage/Communication</a>
Community portal	<a href="https://www.mediawiki.org/wiki/Project:Help">/wiki/Project:Help</a>
Contribute	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/How_to_contribute">/wiki/Special:MyLanguage/How_to_contribute</a>
Contributions	<a href="https://www.mediawiki.org/wiki/Special:MyContributions">/wiki/Special:MyContributions</a>
Cookie statement	<a href="https://foundation.wikimedia.org/wiki/Cookie_statement">https://foundation.wikimedia.org/wiki/Cookie_statement</a>
Create a book	<a href="https://www.mediawiki.org/w/index.php?title=Special:Book&amp;bookcmd=book_creator&amp;referer=MediaWiki">/w/index.php?title=Special:Book&amp;bookcmd=book_creator&amp;referer=MediaWiki</a>
Create account	<a href="https://www.mediawiki.org/w/index.php?title=Special:CreateAccount&amp;returnto=MediaWiki">/w/index.php?title=Special:CreateAccount&amp;returnto=MediaWiki</a>
Create account	<a href="https://www.mediawiki.org/w/index.php?title=Special:CreateAccount&amp;returnto=MediaWiki">/w/index.php?title=Special:CreateAccount&amp;returnto=MediaWiki</a>
Creative Commons	<a href="https://creativecommons.org/licenses/by-sa/3.0/">https://creativecommons.org/licenses/by-sa/3.0/</a>
Attribution-ShareAlike License	
Deutsch	<a href="https://www.mediawiki.org/wiki/Template:Main_page/de">https://www.mediawiki.org/wiki/Template:Main_page/de</a>
Developer portal	<a href="https://developer.wikimedia.org/">https://developer.wikimedia.org/</a>
Developers	<a href="https://developer.wikimedia.org/">https://developer.wikimedia.org</a>
Disclaimers	<a href="https://www.mediawiki.org/wiki/Project:General_disclaimer">/wiki/Project:General_disclaimer</a>
Discussion	<a href="https://www.mediawiki.org/wiki/Talk:MediaWiki">/wiki/Talk:MediaWiki</a>
Download	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Download">/wiki/Special:MyLanguage/Download</a>
Download as PDF	<a href="https://www.mediawiki.org/w/index.php?title=Special:DownloadAsPdf&amp;page=MediaWiki&amp;action=show-download-screen">/w/index.php?title=Special:DownloadAsPdf&amp;page=MediaWiki&amp;action=show-download-screen</a>
EMWCon	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/EMWCon_Spring_2023">/wiki/Special:MyLanguage/EMWCon_Spring_2023</a>
English	#
English	<a href="https://www.mediawiki.org/wiki/Template:Main_page">/wiki/Template:Main_page</a>
FAQ	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:FAQ">/wiki/Special:MyLanguage/Manual:FAQ</a>
FAQ	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:FAQ">/wiki/Special:MyLanguage/Manual:FAQ</a>
Find out more	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:What_is_MediaWiki%3F">/wiki/Special:MyLanguage/Manual:What_is_MediaWiki%3F</a>
Get MediaWiki	<a href="https://www.mediawiki.org/wiki/Download">/wiki/Download</a>
Get extensions	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Category:Extensions">/wiki/Special:MyLanguage/Category:Extensions</a>
Get involved	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/How_to_contribute">/wiki/Special:MyLanguage/How_to_contribute</a>
Get professional development and consulting	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Professional_development_and_consulting">/wiki/Special:MyLanguage/Professional_development_and_consulting</a>
Jawa	<a href="https://www.mediawiki.org/wiki/Template:Main_page/jv">https://www.mediawiki.org/wiki/Template:Main_page/jv</a>
Jump to content	#bodyContent
Languages pages	<a href="https://www.mediawiki.org/wiki/Category:Languages_pages">/wiki/Category:Languages_pages</a>
Learn how to edit a page	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Help:Editing_pages">/wiki/Special:MyLanguage/Help:Editing_pages</a>
Learn how to navigate	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Help:Navigation">/wiki/Special:MyLanguage/Help:Navigation</a>
Learn more about reading, editing, and personal customization	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Help:Contents">/wiki/Special:MyLanguage/Help:Contents</a>
Log in	<a href="https://www.mediawiki.org/w/index.php?title=Special:UserLogin&amp;returnto=MediaWiki">/w/index.php?title=Special:UserLogin&amp;returnto=MediaWiki</a>
Log in	<a href="https://www.mediawiki.org/w/index.php?title=Special:UserLogin&amp;returnto=MediaWiki">/w/index.php?title=Special:UserLogin&amp;returnto=MediaWiki</a>
Main Page	<a href="https://www.mediawiki.org/wiki/MediaWiki">/wiki/MediaWiki</a>
Main page	<a href="https://www.mediawiki.org/wiki/MediaWiki">/wiki/MediaWiki</a>

Text	Url
MediaWiki 1.35.10, 1.38.6 and 1.39.3 security releases	<a href="https://lists.wikimedia.org/hyperkitty/list/mediawiki-announce@lists.wikimedia.org/message/6UQBHI5FWLATD7QO7DI4YS54U7XSSLAN/">https://lists.wikimedia.org/hyperkitty/list/mediawiki-announce@lists.wikimedia.org/message/6UQBHI5FWLATD7QO7DI4YS54U7XSSLAN/</a>
MediaWiki Stakeholders	<a href="https://meta.wikimedia.org/wiki/Main_Page">/wiki/Special:MyLanguage/MediaWiki_Stakeholders%27_Group</a>
Meta-Wiki	<a href="https://meta.wikimedia.org/wiki/Main_Page">https://meta.wikimedia.org/wiki/Main_Page</a>
Mirandés	<a href="https://www.mediawiki.org/wiki/Template:Main_page/mwl">https://www.mediawiki.org/wiki/Template:Main_page/mwl</a>
Mobile view	<a href="https://m.mediawiki.org/w/index.php?title=MediaWiki&amp;mobileaction=toggle_view_mob">//m.mediawiki.org/w/index.php?title=MediaWiki&amp;mobileaction=toggle_view_mob</a>
More news	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/News">https://www.mediawiki.org/wiki/Special:MyLanguage/News</a>
Multilingual Wikisource	<a href="https://wikisource.org/wiki/Main_Page">https://wikisource.org/wiki/Main_Page</a>
Nederlands	<a href="https://www.mediawiki.org/wiki/Template:Main_page/nl">https://www.mediawiki.org/wiki/Template:Main_page/nl</a>
Other languages:	<a href="https://www.mediawiki.org/wiki/Template:Main_page/nl">/wiki/Special:MyLanguage/Project:Language_policy</a>
Page information	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;action=info">/w/index.php?title=MediaWiki&amp;action=info</a>
Permanent link	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;oldid=3878227">/w/index.php?title=MediaWiki&amp;oldid=3878227</a>
Printable version	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;printable=yes">/w/index.php?title=MediaWiki&amp;printable=yes</a>
Privacy policy	<a href="https://foundation.wikimedia.org/wiki/Privacy_policy">https://foundation.wikimedia.org/wiki/Privacy_policy</a>
Random page	<a href="https://www.mediawiki.org/wiki/Special:Random">/wiki/Special:Random</a>
Read	<a href="https://www.mediawiki.org/wiki/MediaWiki">/wiki/MediaWiki</a>
Read	<a href="https://www.mediawiki.org/wiki/MediaWiki">/wiki/MediaWiki</a>
Recent changes	<a href="https://www.mediawiki.org/wiki/Special:RecentChanges">/wiki/Special:RecentChanges</a>
Related changes	<a href="https://www.mediawiki.org/wiki/Special:RecentChangesLinked/MediaWiki">/wiki/Special:RecentChangesLinked/MediaWiki</a>
Report wrong software behavior or a feature proposal	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/How_to_report_a_bug">/wiki/Special:MyLanguage/How_to_report_a_bug</a>
Sandbox	<a href="https://www.mediawiki.org/wiki/Project:Sandbox">/wiki/Project:Sandbox</a>
Search	<a href="https://www.mediawiki.org/wiki/Special:Search">/wiki/Special:Search</a>
Soomaaliga	<a href="https://www.mediawiki.org/wiki/Template:Main_page/so">https://www.mediawiki.org/wiki/Template:Main_page/so</a>
Special pages	<a href="https://www.mediawiki.org/wiki/Special:SpecialPages">/wiki/Special:SpecialPages</a>
Statistics	<a href="https://stats.wikimedia.org/#/www.mediawiki.org">https://stats.wikimedia.org/#/www.mediawiki.org</a>
Support desk	<a href="https://www.mediawiki.org/wiki/Project:Support_desk">/wiki/Project:Support_desk</a>
Talk	<a href="https://www.mediawiki.org/wiki/Special:MyTalk">/wiki/Special:MyTalk</a>
Tech blog	<a href="https://techblog.wikimedia.org/">//techblog.wikimedia.org/</a>
Technical manual	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Contents">/wiki/Special:MyLanguage/Manual:Contents</a>
Terms of Use	<a href="https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Terms_of_Use">https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Terms_of_Use</a>
Tiếng Việt	<a href="https://www.mediawiki.org/wiki/Template:Main_page/vi">https://www.mediawiki.org/wiki/Template:Main_page/vi</a>
Translate content	<a href="https://www.mediawiki.org/wiki/Special:LanguageStats">/wiki/Special:LanguageStats</a>
Türkçe	<a href="https://www.mediawiki.org/wiki/Template:Main_page/tr">https://www.mediawiki.org/wiki/Template:Main_page/tr</a>
Upload file	<a href="https://commons.wikimedia.org/wiki/Special:UploadWizard">//commons.wikimedia.org/wiki/Special:UploadWizard</a>
User help	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Help:Contents">/wiki/Special:MyLanguage/Help:Contents</a>
View history	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;action=history">/w/index.php?title=MediaWiki&amp;action=history</a>
View history	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;action=history">/w/index.php?title=MediaWiki&amp;action=history</a>
View livestream	<a href="https://www.youtube.com/watch?v=r0xEhy9bBFU">https://www.youtube.com/watch?v=r0xEhy9bBFU</a>
View source	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;action=edit">/w/index.php?title=MediaWiki&amp;action=edit</a>
View source	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;action=edit">/w/index.php?title=MediaWiki&amp;action=edit</a>
Village pump	<a href="https://www.mediawiki.org/wiki/Project:Village_Pump">/wiki/Project:Village_Pump</a>
What links here	<a href="https://www.mediawiki.org/wiki/Special:WhatLinksHere/MediaWiki">/wiki/Special:WhatLinksHere/MediaWiki</a>
Wikibooks	<a href="https://en.wikibooks.org/wiki/Main_Page">https://en.wikibooks.org/wiki/Main_Page</a>
Wikidata	<a href="https://www.wikidata.org/wiki/Wikidata:Main_Page">https://www.wikidata.org/wiki/Wikidata:Main_Page</a>
Wikidata item	<a href="https://www.wikidata.org/wiki/Special:EntityPage/Q5296">https://www.wikidata.org/wiki/Special:EntityPage/Q5296</a>
Wikimania	<a href="https://wikimania.wikimedia.org/wiki/Wikimania">https://wikimania.wikimedia.org/wiki/Wikimania</a>
Wikimedia Commons	<a href="https://commons.wikimedia.org/wiki/Main_Page">https://commons.wikimedia.org/wiki/Main_Page</a>
Wikimedia Developer Portal	<a href="https://developer.wikimedia.org">https://developer.wikimedia.org</a>
Wikimedia Hackathon	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Wikimedia_Hackathon_2023">/wiki/Special:MyLanguage/Wikimedia_Hackathon_2023</a>

Text	Url
Wikinews	<a href="https://en.wikinews.org/wiki/Main_Page">https://en.wikinews.org/wiki/Main_Page</a>
Wikipedia	<a href="https://en.wikipedia.org/wiki/Main_Page">https://en.wikipedia.org/wiki/Main_Page</a>
Wikiquote	<a href="https://en.wikiquote.org/wiki/Main_Page">https://en.wikiquote.org/wiki/Main_Page</a>
Wikisource	<a href="https://en.wikisource.org/wiki/Main_Page">https://en.wikisource.org/wiki/Main_Page</a>
Wikispecies	<a href="https://species.wikimedia.org/wiki/Main_Page">https://species.wikimedia.org/wiki/Main_Page</a>
Wikiversity	<a href="https://en.wikiversity.org/wiki/Wikiversity:Main_Page">https://en.wikiversity.org/wiki/Wikiversity:Main_Page</a>
Wikivoyage	<a href="https://en.wikivoyage.org/wiki/Main_Page">https://en.wikivoyage.org/wiki/Main_Page</a>
Wiktionary	<a href="https://en.wiktionary.org/wiki/Wiktionary:Main_Page">https://en.wiktionary.org/wiki/Wiktionary:Main_Page</a>
asturianu	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ast">https://www.mediawiki.org/wiki/Template:Main_page/ast</a>
bosanski	<a href="https://www.mediawiki.org/wiki/Template:Main_page/bs">https://www.mediawiki.org/wiki/Template:Main_page/bs</a>
català	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ca">https://www.mediawiki.org/wiki/Template:Main_page/ca</a>
configure	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:System_administration">/wiki/Special:MyLanguage/Manual:System_administration</a>
dansk	<a href="https://www.mediawiki.org/wiki/Template:Main_page/da">https://www.mediawiki.org/wiki/Template:Main_page/da</a>
developer documentation	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Developer_hub">/wiki/Special:MyLanguage/Developer_hub</a>
errors and symptoms	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Errors_and_symptoms">/wiki/Special:MyLanguage/Manual:Errors_and_symptoms</a>
español	<a href="https://www.mediawiki.org/wiki/Template:Main_page/es">https://www.mediawiki.org/wiki/Template:Main_page/es</a>
extensions	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Extensions">/wiki/Special:MyLanguage/Manual:Extensions</a>
français	<a href="https://www.mediawiki.org/wiki/Template:Main_page/fr">https://www.mediawiki.org/wiki/Template:Main_page/fr</a>
free and open	<a href="https://en.wikipedia.org/wiki/FLOSS">https://en.wikipedia.org/wiki/FLOSS</a>
hosting services	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Hosting_services">/wiki/Special:MyLanguage/Hosting_services</a>
hrvatski	<a href="https://www.mediawiki.org/wiki/Template:Main_page/hr">https://www.mediawiki.org/wiki/Template:Main_page/hr</a>
https:	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;oldid=3878227">https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;oldid=3878227</a>
//www.mediawiki.org/w/index.php?title=MediaWiki&oldid=3878227	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;oldid=3878227">https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;oldid=3878227</a>
if MediaWiki is right for you	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Deciding_whether_to_use_a_wiki_as_your_v">/wiki/Special:MyLanguage/Manual:Deciding_whether_to_use_a_wiki_as_your_v</a>
install	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Installation_guide">/wiki/Special:MyLanguage/Manual:Installation_guide</a>
italiano	<a href="https://www.mediawiki.org/wiki/Template:Main_page/it">https://www.mediawiki.org/wiki/Template:Main_page/it</a>
learn more	<a href="https://www.mediawiki.org/wiki/Help:Introduction">/wiki/Help:Introduction</a>
magyar	<a href="https://www.mediawiki.org/wiki/Template:Main_page/hu">https://www.mediawiki.org/wiki/Template:Main_page/hu</a>
multilingual	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Localisation">/wiki/Special:MyLanguage/Localisation</a>
polski	<a href="https://www.mediawiki.org/wiki/Template:Main_page/pl">https://www.mediawiki.org/wiki/Template:Main_page/pl</a>
português	<a href="https://www.mediawiki.org/wiki/Template:Main_page/pt">https://www.mediawiki.org/wiki/Template:Main_page/pt</a>
português do Brasil	<a href="https://www.mediawiki.org/wiki/Template:Main_page/pt-br">https://www.mediawiki.org/wiki/Template:Main_page/pt-br</a>
română	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ro">https://www.mediawiki.org/wiki/Template:Main_page/ro</a>
sardu	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sc">https://www.mediawiki.org/wiki/Template:Main_page/sc</a>
shqip	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sq">https://www.mediawiki.org/wiki/Template:Main_page/sq</a>
slovenčina	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sk">https://www.mediawiki.org/wiki/Template:Main_page/sk</a>
slovenščina	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sl">https://www.mediawiki.org/wiki/Template:Main_page/sl</a>
suomi	<a href="https://www.mediawiki.org/wiki/Template:Main_page/fi">https://www.mediawiki.org/wiki/Template:Main_page/fi</a>
support desk	<a href="https://www.mediawiki.org/wiki/Project:Support_desk">/wiki/Project:Support_desk</a>
svenska	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sv">https://www.mediawiki.org/wiki/Template:Main_page/sv</a>
tens of thousands of websites	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Sites_using_MediaWiki">/wiki/Special:MyLanguage/Sites_using_MediaWiki</a>
thousands of companies and organizations	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/MediaWiki_testimonials">/wiki/Special:MyLanguage/MediaWiki_testimonials</a>
čeština	<a href="https://www.mediawiki.org/wiki/Template:Main_page/cs">https://www.mediawiki.org/wiki/Template:Main_page/cs</a>
( )	<a href="https://www.mediawiki.org/wiki/Template:Main_page/be">https://www.mediawiki.org/wiki/Template:Main_page/be</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/be-tarask">https://www.mediawiki.org/wiki/Template:Main_page/be-tarask</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/bg">https://www.mediawiki.org/wiki/Template:Main_page/bg</a>
/ srpski	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ru">https://www.mediawiki.org/wiki/Template:Main_page/ru</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sr">https://www.mediawiki.org/wiki/Template:Main_page/sr</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/uk">https://www.mediawiki.org/wiki/Template:Main_page/uk</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/kk">https://www.mediawiki.org/wiki/Template:Main_page/kk</a>

Text	Url
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/hy">https://www.mediawiki.org/wiki/Template:Main_page/hy</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/he">https://www.mediawiki.org/wiki/Template:Main_page/he</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ar">https://www.mediawiki.org/wiki/Template:Main_page/ar</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/fa">https://www.mediawiki.org/wiki/Template:Main_page/fa</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ckb">https://www.mediawiki.org/wiki/Template:Main_page/ckb</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/hi">https://www.mediawiki.org/wiki/Template:Main_page/hi</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/bn">https://www.mediawiki.org/wiki/Template:Main_page/bn</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/gu">https://www.mediawiki.org/wiki/Template:Main_page/gu</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/si">https://www.mediawiki.org/wiki/Template:Main_page/si</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/th">https://www.mediawiki.org/wiki/Template:Main_page/th</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/zh">https://www.mediawiki.org/wiki/Template:Main_page/zh</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ja">https://www.mediawiki.org/wiki/Template:Main_page/ja</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/yue">https://www.mediawiki.org/wiki/Template:Main_page/yue</a>
	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ko">https://www.mediawiki.org/wiki/Template:Main_page/ko</a>

4. Generar una tabla con cada enlace encontrado, indicando el texto que acompaña el enlace, y el número de veces que aparece un enlace con ese mismo objetivo.

### Resolución:

En este caso se usó la función **table()** para obtener la tabla de repeticiones del texto acompañado de la Url. En base a ello se realiza un filtro donde la frecuencia sea mayor a 0 para considerar solo el texto con su respectiva url que existen y lo ordenamos en orden alfabético con la función **arrange()**. Esta nueva tabla figura con la variable **links\_data**. Todo ello se realizó con el siguiente código.

```
# Convirtiendo a data.frame y hallando el n° de repeticiones
concurrances <- as.data.frame(table(links_tables))

# Filtrando solo los enlaces existentes, es decir todos lo que tenga >0
# en la columna freq y lo ordenamos en orden alfabético
links_data <- filter(concurrances, Freq > 0) %>% arrange(Text)
# Visualización de la tabla en el archivo pdf
kable(links_data)
```

Text	Url	Freq
	/wiki/File:Wikimedia_Hackathon_Prague_2019_-_Group_Photo_-_CLK_-_cropped.jpg	1
	/wiki/Help:Contents	1
	/wiki/Help:Editing_pages	1
	/wiki/Help:Navigation	1
	/wiki/How_to_report_a_bug	1
	/wiki/MediaWiki	1
	/wiki/Professional_development_and_consulting	1
	/wiki/Project:Language_policy	1
	<a href="https://wikimediafoundation.org/">https://wikimediafoundation.org/</a>	1
	<a href="https://www.mediawiki.org/">https://www.mediawiki.org/</a>	1
@mediawiki@wikis.world	<a href="https://wikis.world/@mediawiki">https://wikis.world/@mediawiki</a>	1
About MediaWiki.org	/wiki/Project:About	1
Afrikaans	<a href="https://www.mediawiki.org/wiki/Template:Main_page/af">https://www.mediawiki.org/wiki/Template:Main_page/af</a>	1
asturianu	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ast">https://www.mediawiki.org/wiki/Template:Main_page/ast</a>	1

Text	Url	Freq
Bahasa Indonesia	<a href="https://www.mediawiki.org/wiki/Template:Main_page/id">https://www.mediawiki.org/wiki/Template:Main_page/id</a>	1
Bahasa Melayu	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ms">https://www.mediawiki.org/wiki/Template:Main_page/ms</a>	1
bosanski	<a href="https://www.mediawiki.org/wiki/Template:Main_page/bs">https://www.mediawiki.org/wiki/Template:Main_page/bs</a>	1
català	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ca">https://www.mediawiki.org/wiki/Template:Main_page/ca</a>	1
čeština	<a href="https://www.mediawiki.org/wiki/Template:Main_page/cs">https://www.mediawiki.org/wiki/Template:Main_page/cs</a>	1
Cite this page	<a href="/w/index.php?title=Special:CiteThisPage&amp;page=MediaWiki&amp;id=3878227&amp;wpFormId="> /w/index.php?title=Special:CiteThisPage&amp;page=MediaWiki&amp;id=3878227&amp;wpFormId=</a>	
Code of Conduct	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/Code_of_Conduct">https://www.mediawiki.org/wiki/Special:MyLanguage/Code_of_Conduct</a>	1
Code statistics	<a href="/wiki/Development_statistics">/wiki/Development_statistics</a>	1
Communication	<a href="/wiki/Special:MyLanguage/Communication">/wiki/Special:MyLanguage/Communication</a>	1
Community portal	<a href="/wiki/Project:Help">/wiki/Project:Help</a>	1
configure	<a href="/wiki/Special:MyLanguage/Manual:System_administration">/wiki/Special:MyLanguage/Manual:System_administration</a>	1
Contribute	<a href="/wiki/Special:MyLanguage/How_to_contribute">/wiki/Special:MyLanguage/How_to_contribute</a>	1
Contributions	<a href="/wiki/Special:MyContributions">/wiki/Special:MyContributions</a>	1
Cookie statement	<a href="https://foundation.wikimedia.org/wiki/Cookie_statement">https://foundation.wikimedia.org/wiki/Cookie_statement</a>	1
Create a book	<a href="/w/index.php?title=Special:Book&amp;bookcmd=book_creator&amp;referer=MediaWiki">/w/index.php?title=Special:Book&amp;bookcmd=book_creator&amp;referer=MediaWiki</a>	1
Create account	<a href="/w/index.php?title=Special:CreateAccount&amp;returnto=MediaWiki">/w/index.php?title=Special:CreateAccount&amp;returnto=MediaWiki</a>	2
Creative Commons Attribution-ShareAlike License	<a href="https://creativecommons.org/licenses/by-sa/3.0/">https://creativecommons.org/licenses/by-sa/3.0/</a>	1
dansk	<a href="https://www.mediawiki.org/wiki/Template:Main_page/da">https://www.mediawiki.org/wiki/Template:Main_page/da</a>	1
Deutsch	<a href="https://www.mediawiki.org/wiki/Template:Main_page/de">https://www.mediawiki.org/wiki/Template:Main_page/de</a>	1
developer documentation	<a href="/wiki/Special:MyLanguage/Developer_hub">/wiki/Special:MyLanguage/Developer_hub</a>	1
Developer portal	<a href="https://developer.wikimedia.org/">https://developer.wikimedia.org/</a>	1
Developers	<a href="https://developer.wikimedia.org">https://developer.wikimedia.org</a>	1
Disclaimers	<a href="/wiki/Project:General_disclaimer">/wiki/Project:General_disclaimer</a>	1
Discussion	<a href="/wiki/Talk:MediaWiki">/wiki/Talk:MediaWiki</a>	1
Download	<a href="/wiki/Special:MyLanguage/Download">/wiki/Special:MyLanguage/Download</a>	1
Download as PDF	<a href="/w/index.php?title=Special:DownloadAsPdf&amp;page=MediaWiki&amp;action=show-download-screen">/w/index.php?title=Special:DownloadAsPdf&amp;page=MediaWiki&amp;action=show-download-screen</a>	
EMWCon	<a href="/wiki/Special:MyLanguage/EMWCon_Spring_2023">/wiki/Special:MyLanguage/EMWCon_Spring_2023</a>	1
English	<a href="#">#</a>	1
English	<a href="/wiki/Template:Main_page">/wiki/Template:Main_page</a>	1
errors and symptoms	<a href="/wiki/Special:MyLanguage/Manual:Errors_and_symptoms">/wiki/Special:MyLanguage/Manual:Errors_and_symptoms</a>	1
español	<a href="https://www.mediawiki.org/wiki/Template:Main_page/es">https://www.mediawiki.org/wiki/Template:Main_page/es</a>	1
extensions	<a href="/wiki/Special:MyLanguage/Manual:Extensions">/wiki/Special:MyLanguage/Manual:Extensions</a>	1
FAQ	<a href="/wiki/Special:MyLanguage/Manual:FAQ">/wiki/Special:MyLanguage/Manual:FAQ</a>	2
Find out more	<a href="/wiki/Special:MyLanguage/Manual:What_is_MediaWiki%3F">/wiki/Special:MyLanguage/Manual:What_is_MediaWiki%3F</a>	1
français	<a href="https://www.mediawiki.org/wiki/Template:Main_page/fr">https://www.mediawiki.org/wiki/Template:Main_page/fr</a>	1
free and open	<a href="https://en.wikipedia.org/wiki/FLOSS">https://en.wikipedia.org/wiki/FLOSS</a>	1
Get extensions	<a href="/wiki/Special:MyLanguage/Category:Extensions">/wiki/Special:MyLanguage/Category:Extensions</a>	1
Get involved	<a href="/wiki/Special:MyLanguage/How_to_contribute">/wiki/Special:MyLanguage/How_to_contribute</a>	1
Get MediaWiki	<a href="/wiki/Download">/wiki/Download</a>	1
Get professional development and consulting	<a href="/wiki/Special:MyLanguage/Professional_development_and_consulting">/wiki/Special:MyLanguage/Professional_development_and_consulting</a>	
hosting services	<a href="/wiki/Special:MyLanguage/Hosting_services">/wiki/Special:MyLanguage/Hosting_services</a>	1
hrvatski	<a href="https://www.mediawiki.org/wiki/Template:Main_page/hr">https://www.mediawiki.org/wiki/Template:Main_page/hr</a>	1
<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;oldid=3878227">https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;oldid=3878227</a>	<a href="https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;oldid=3878227">https://www.mediawiki.org/w/index.php?title=MediaWiki&amp;oldid=3878227</a>	1
if MediaWiki is right for you	<a href="/wiki/Special:MyLanguage/Manual:Deciding_whether_to_use_a_wiki_as_your_wiki">/wiki/Special:MyLanguage/Manual:Deciding_whether_to_use_a_wiki_as_your_wiki</a>	
install	<a href="/wiki/Special:MyLanguage/Manual:Installation_guide">/wiki/Special:MyLanguage/Manual:Installation_guide</a>	1
italiano	<a href="https://www.mediawiki.org/wiki/Template:Main_page/it">https://www.mediawiki.org/wiki/Template:Main_page/it</a>	1

Text	Url	Freq
Jawa	<a href="https://www.mediawiki.org/wiki/Template:Main_page/jv">https://www.mediawiki.org/wiki/Template:Main_page/jv</a>	1
Jump to content	<a href="#">#bodyContent</a>	1
Languages pages	<a href="/wiki/Category:Languages_pages">/wiki/Category:Languages_pages</a>	1
Learn how to edit a page	<a href="/wiki/Special:MyLanguage/Help:Editing_pages">/wiki/Special:MyLanguage/Help:Editing_pages</a>	1
Learn how to navigate	<a href="/wiki/Special:MyLanguage/Help:Navigation">/wiki/Special:MyLanguage/Help:Navigation</a>	1
learn more	<a href="/wiki/Help:Introduction">/wiki/Help:Introduction</a>	1
Learn more about reading, editing, and personal customization	<a href="/wiki/Special:MyLanguage/Help:Contents">/wiki/Special:MyLanguage/Help:Contents</a>	1
Log in	<a href="/w/index.php?title=Special:UserLogin&amp;returnto=MediaWiki">/w/index.php?title=Special:UserLogin&amp;returnto=MediaWiki</a>	2
magyar	<a href="https://www.mediawiki.org/wiki/Template:Main_page/hu">https://www.mediawiki.org/wiki/Template:Main_page/hu</a>	1
Main page	<a href="/wiki/MediaWiki">/wiki/MediaWiki</a>	1
Main Page	<a href="/wiki/MediaWiki">/wiki/MediaWiki</a>	1
MediaWiki 1.35.10, 1.38.6 and 1.39.3 security releases	<a href="https://lists.wikimedia.org/hyperkitty/list/mediawiki-announce@lists.wikimedia.org/message/6UQBHI5FWLATD7QO7DI4YS54U7XSSLAN/">https://lists.wikimedia.org/hyperkitty/list/mediawiki-announce@lists.wikimedia.org/message/6UQBHI5FWLATD7QO7DI4YS54U7XSSLAN/</a>	1
MediaWiki Stakeholders	<a href="/wiki/Special:MyLanguage/MediaWiki_Stakeholders%27_Group">/wiki/Special:MyLanguage/MediaWiki_Stakeholders%27_Group</a>	1
Meta-Wiki	<a href="https://meta.wikimedia.org/wiki/Main_Page">https://meta.wikimedia.org/wiki/Main_Page</a>	1
Mirandés	<a href="https://www.mediawiki.org/wiki/Template:Main_page/mwl">https://www.mediawiki.org/wiki/Template:Main_page/mwl</a>	1
Mobile view	<a href="//m.mediawiki.org/w/index.php?title=MediaWiki&amp;mobileaction=toggle_view_mobile">//m.mediawiki.org/w/index.php?title=MediaWiki&amp;mobileaction=toggle_view_mobile</a>	1
More news	<a href="https://www.mediawiki.org/wiki/Special:MyLanguage/News">https://www.mediawiki.org/wiki/Special:MyLanguage/News</a>	1
multilingual	<a href="/wiki/Special:MyLanguage/Localisation">/wiki/Special:MyLanguage/Localisation</a>	1
Multilingual Wikisource	<a href="https://wikisource.org/wiki/Main_Page">https://wikisource.org/wiki/Main_Page</a>	1
Nederlands	<a href="https://www.mediawiki.org/wiki/Template:Main_page/nl">https://www.mediawiki.org/wiki/Template:Main_page/nl</a>	1
Other languages:	<a href="/wiki/Special:MyLanguage/Project:Language_policy">/wiki/Special:MyLanguage/Project:Language_policy</a>	1
Page information	<a href="/w/index.php?title=MediaWiki&amp;action=info">/w/index.php?title=MediaWiki&amp;action=info</a>	1
Permanent link	<a href="/w/index.php?title=MediaWiki&amp;oldid=3878227">/w/index.php?title=MediaWiki&amp;oldid=3878227</a>	1
polski	<a href="https://www.mediawiki.org/wiki/Template:Main_page/pl">https://www.mediawiki.org/wiki/Template:Main_page/pl</a>	1
português	<a href="https://www.mediawiki.org/wiki/Template:Main_page/pt">https://www.mediawiki.org/wiki/Template:Main_page/pt</a>	1
português do Brasil	<a href="https://www.mediawiki.org/wiki/Template:Main_page/pt-br">https://www.mediawiki.org/wiki/Template:Main_page/pt-br</a>	1
Printable version	<a href="/w/index.php?title=MediaWiki&amp;printable=yes">/w/index.php?title=MediaWiki&amp;printable=yes</a>	1
Privacy policy	<a href="https://foundation.wikimedia.org/wiki/Privacy_policy">https://foundation.wikimedia.org/wiki/Privacy_policy</a>	1
Random page	<a href="/wiki/Special:Random">/wiki/Special:Random</a>	1
Read	<a href="/wiki/MediaWiki">/wiki/MediaWiki</a>	2
Recent changes	<a href="/wiki/Special:RecentChanges">/wiki/Special:RecentChanges</a>	1
Related changes	<a href="/wiki/Special:RecentChangesLinked/MediaWiki">/wiki/Special:RecentChangesLinked/MediaWiki</a>	1
Report wrong software behavior or a feature proposal	<a href="/wiki/Special:MyLanguage/How_to_report_a_bug">/wiki/Special:MyLanguage/How_to_report_a_bug</a>	1
română	<a href="https://www.mediawiki.org/wiki/Template:Main_page/ro">https://www.mediawiki.org/wiki/Template:Main_page/ro</a>	1
Sandbox	<a href="/wiki/Project:Sandbox">/wiki/Project:Sandbox</a>	1
sardu	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sc">https://www.mediawiki.org/wiki/Template:Main_page/sc</a>	1
Search	<a href="/wiki/Special:Search">/wiki/Special:Search</a>	1
shqip	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sq">https://www.mediawiki.org/wiki/Template:Main_page/sq</a>	1
slovenčina	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sk">https://www.mediawiki.org/wiki/Template:Main_page/sk</a>	1
slovenščina	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sl">https://www.mediawiki.org/wiki/Template:Main_page/sl</a>	1
Soomaaliga	<a href="https://www.mediawiki.org/wiki/Template:Main_page/so">https://www.mediawiki.org/wiki/Template:Main_page/so</a>	1
Special pages	<a href="/wiki/Special:SpecialPages">/wiki/Special:SpecialPages</a>	1
Statistics	<a href="https://stats.wikimedia.org/#/www.mediawiki.org">https://stats.wikimedia.org/#/www.mediawiki.org</a>	1
suomi	<a href="https://www.mediawiki.org/wiki/Template:Main_page/fi">https://www.mediawiki.org/wiki/Template:Main_page/fi</a>	1
support desk	<a href="/wiki/Project:Support_desk">/wiki/Project:Support_desk</a>	1
Support desk	<a href="/wiki/Project:Support_desk">/wiki/Project:Support_desk</a>	1
svenska	<a href="https://www.mediawiki.org/wiki/Template:Main_page/sv">https://www.mediawiki.org/wiki/Template:Main_page/sv</a>	1
Talk	<a href="/wiki/Special:MyTalk">/wiki/Special:MyTalk</a>	1



Text	Url	Freq
Tech blog	//techblog.wikimedia.org/	1
Technical manual	/wiki/Special:MyLanguage/Manual:Contents	1
tens of thousands of websites	/wiki/Special:MyLanguage/Sites_using_MediaWiki	1
Terms of Use	https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Terms_of_Use	1
thousands of companies and organizations	/wiki/Special:MyLanguage/MediaWiki_testimonials	1
Tiếng Việt	https://www.mediawiki.org/wiki/Template:Main_page/vi	1
Translate content	/wiki/Special:LanguageStats	1
Türkçe	https://www.mediawiki.org/wiki/Template:Main_page/tr	1
Upload file	//commons.wikimedia.org/wiki/Special:UploadWizard	1
User help	/wiki/Special:MyLanguage/Help:Contents	1
View history	/w/index.php?title=MediaWiki&action=history	2
View livestream	https://www.youtube.com/watch?v=r0xEhy9bBFU	1
View source	/w/index.php?title=MediaWiki&action=edit	2
Village pump	/wiki/Project:Village_Pump	1
What links here	/wiki/Special:WhatLinksHere/MediaWiki	1
Wikibooks	https://en.wikibooks.org/wiki/Main_Page	1
Wikidata	https://www.wikidata.org/wiki/Wikidata:Main_Page	1
Wikidata item	https://www.wikidata.org/wiki/Special:EntityPage/Q5296	1
Wikimania	https://wikimania.wikimedia.org/wiki/Wikimania	1
Wikimedia Commons	https://commons.wikimedia.org/wiki/Main_Page	1
Wikimedia Developer Portal	https://developer.wikimedia.org	1
Wikimedia Hackathon	/wiki/Special:MyLanguage/Wikimedia_Hackathon_2023	1
Wikinews	https://en.wikinews.org/wiki/Main_Page	1
Wikipedia	https://en.wikipedia.org/wiki/Main_Page	1
Wikiquote	https://en.wikiquote.org/wiki/Main_Page	1
Wikisource	https://en.wikisource.org/wiki/Main_Page	1
Wikispecies	https://species.wikimedia.org/wiki/Main_Page	1
Wikiversity	https://en.wikiversity.org/wiki/Wikiversity:Main_Page	1
Wikivoyage	https://en.wikivoyage.org/wiki/Main_Page	1
Wiktionary	https://en.wiktionary.org/wiki/Wiktionary:Main_Page	1
( )	https://www.mediawiki.org/wiki/Template:Main_page/be	1
	https://www.mediawiki.org/wiki/Template:Main_page/be-tarask	1
	https://www.mediawiki.org/wiki/Template:Main_page/bg	1
	https://www.mediawiki.org/wiki/Template:Main_page/kk	1
	https://www.mediawiki.org/wiki/Template:Main_page/ru	1
/ srpski	https://www.mediawiki.org/wiki/Template:Main_page/sr	1
	https://www.mediawiki.org/wiki/Template:Main_page/uk	1
	https://www.mediawiki.org/wiki/Template:Main_page/hy	1
	https://www.mediawiki.org/wiki/Template:Main_page/he	1
	https://www.mediawiki.org/wiki/Template:Main_page/ar	1
	https://www.mediawiki.org/wiki/Template:Main_page/fa	1
	https://www.mediawiki.org/wiki/Template:Main_page/ckb	1
	https://www.mediawiki.org/wiki/Template:Main_page/hi	1
	https://www.mediawiki.org/wiki/Template:Main_page/bn	1
	https://www.mediawiki.org/wiki/Template:Main_page/gu	1
	https://www.mediawiki.org/wiki/Template:Main_page/si	1
	https://www.mediawiki.org/wiki/Template:Main_page/th	1
	https://www.mediawiki.org/wiki/Template:Main_page/ko	1
	https://www.mediawiki.org/wiki/Template:Main_page/zh	1

Text	Url	Freq
	https://www.mediawiki.org/wiki/Template:Main_page/ja	1
	https://www.mediawiki.org/wiki/Template:Main_page/yue	1

5. Para cada enlace, seguirlo e indicar si está activo (podemos usar el código de status HTTP al hacer una petición a esa URL).

### Resolución:

Primero se procede a obtener los enlaces completos, para ello se valida que valores de la columna Url tiene https y las que no para completarlos con “https” con la función **case\_when()** y se realiza la unión con la función **paste()**. Las urls completas se guardan en la columna **Url\_final**.

Luego para obtener el código de respuesta de cada url, se realiza el recorrido con la función **map()** y se aplica la función **HEAD()** para obtener el código de respuesta con el parámetro **status\_code**. Ese valor se guarda en la columna **Status\_Code**. Lo mencionado se realizó con el siguiente código.

```
# Agregando la URL completa
base_url <- "https://www.mediawiki.org"

# Validando los caracteres al inicio de la columna URL y uniendolo con la url base
links_data$Final_Url <- case_when(
  # validando los caracteres al inicio de la URL
  grepl("^/wiki/|^/w/|^//", links_data$Url) |
  grepl("^#", links_data$Url) ~ paste0(base_url, links_data$Url),
  grepl("^https", links_data$Url) ~ links_data$Url,
  TRUE ~ NA_character_
)

# Incorporando el valor status_code
# Demora 1 minuto
# Recorriendo los datos para incorporar HEAD y hallar el status_code
cat("En Proceso... \n")
```

## En Proceso...

```
status_codes <- map(links_data$Final_Url, HEAD)
# Agregando una columna con el status_code respectivo
links_data$Status_Code <- map(status_codes, status_code)
# Convirtiendo de lista a character
links_data$Status_Code <- as.character(links_data$Status_Code)
# Visualización de la tabla en el archivo pdf
kable(links_data)
```

Text	Url	Freq	Final_Url	Status_Code
	/wiki/File:Wikimedia_Hackathon_Prague_2019_-_Group_Photo_-_CLK_-_cropped.jpg	1	https://www.mediawiki.org/wiki/File:Wikimedia_Hackathon_Prague_2019_-_Group_Photo_-_CLK_-_cropped.jpg	200
	/wiki/Help:Contents	1	https://www.mediawiki.org/wiki/Help:Contents	200

Text	Url	Freq	Final_Url	Status_Code
	/wiki/Help:Editing_pages	1	https://www.mediawiki.org/wiki/Help:Editing_pages	200
	/wiki/Help:Navigation	1	https://www.mediawiki.org/wiki/Help:Navigation	200
	/wiki/How_to_report_a_bug	1	https://www.mediawiki.org/wiki/How_to_report_a_bug	200
	/wiki/MediaWiki	1	https://www.mediawiki.org/wiki/MediaWiki	200
	/wiki/Professional_development_and_consulting	1	https://www.mediawiki.org/wiki/Professional_development_and_consulting	200
	/wiki/Project:Language_policy	1	https://www.mediawiki.org/wiki/Project:Language_policy	200
	https://wikimediafoundation.org/	1	https://wikimediafoundation.org/	200
	https://www.mediawiki.org/	1	https://www.mediawiki.org/	200
@mediawiki@wikis.world	https://wikis.world/@mediawiki	1	https://wikis.world/@mediawiki	200
About	/wiki/Project:About	1	https://www.mediawiki.org/wiki/Project:About	200
MediaWiki.org				
Afrikaans	https://www.mediawiki.org/wiki/Template:Main_page/af	1	https://www.mediawiki.org/wiki/Template:Main_page/af	200
asturianu	https://www.mediawiki.org/wiki/Template:Main_page/ast	1	https://www.mediawiki.org/wiki/Template:Main_page/ast	200
Bahasa Indonesia	https://www.mediawiki.org/wiki/Template:Main_page/id	1	https://www.mediawiki.org/wiki/Template:Main_page/id	200
Bahasa Melayu	https://www.mediawiki.org/wiki/Template:Main_page/ms	1	https://www.mediawiki.org/wiki/Template:Main_page/ms	200
bosanski	https://www.mediawiki.org/wiki/Template:Main_page/bs	1	https://www.mediawiki.org/wiki/Template:Main_page/bs	200
català	https://www.mediawiki.org/wiki/Template:Main_page/ca	1	https://www.mediawiki.org/wiki/Template:Main_page/ca	200
čeština	https://www.mediawiki.org/wiki/Template:Main_page/cs	1	https://www.mediawiki.org/wiki/Template:Main_page/cs	200
Cite this page	/w/index.php?title=Special:CiteThisPage&page=MediaWiki&id=3878227&wpFormIdentifier=titleform	1	https://www.mediawiki.org/wiki/Template:Main_page/cs	200
Code of Conduct	https://www.mediawiki.org/wiki/Special:MyLanguage/Code_of_Conduct	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Code_of_Conduct	200
Code statistics	/wiki/Development_statistics	1	https://www.mediawiki.org/wiki/Development_statistics	200
Communication	/wiki/Special:MyLanguage/Communication	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Communication	200
Community portal	/wiki/Project:Help	1	https://www.mediawiki.org/wiki/Project:Help	200
configure	/wiki/Special:MyLanguage/Manual:System_administration	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:System_administration	200

Text	Url	Freq	Final_Url	Status_Code
Contribute	/wiki/Special:MyLanguage/How_to_contribute	1	https://www.mediawiki.org/wiki/Special:MyLanguage/How_to_contribute	200
Contributions	/wiki/Special:MyContributions	1	https://www.mediawiki.org/wiki/Special:MyContributions	200
Cookie statement	https://foundation.wikimedia.org/wiki/Cookie_statement	1	https://foundation.wikimedia.org/wiki/Cookie_statement	200
Create a book	/w/index.php?title=Special:Book&bookcmd=book_creator&referer=MediaWiki	1	https://www.mediawiki.org/w/index.php?title=Special:Book&bookcmd=book_creator&referer=MediaWiki	200
Create account	/w/index.php?title=Special:CreateAccount	1	https://www.mediawiki.org/w/index.php?title=Special:CreateAccount&returnto=MediaWiki	200
Creative Commons Attribution-ShareAlike License	https://creativecommons.org/licenses/by-sa/3.0/	1	https://creativecommons.org/licenses/by-sa/3.0/	200
dansk	https://www.mediawiki.org/wiki/Template:Main_page/da	1	https://www.mediawiki.org/wiki/Template:Main_page/da	200
Deutsch	https://www.mediawiki.org/wiki/Template:Main_page/de	1	https://www.mediawiki.org/wiki/Template:Main_page/de	200
developer documentation	/wiki/Special:MyLanguage/Developer_hub	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Developer_hub	200
Developer portal	https://developer.wikimedia.org/	1	https://developer.wikimedia.org/	200
Developers	https://developer.wikimedia.org	1	https://developer.wikimedia.org	200
Disclaimers	/wiki/Project:General_disclaimer	1	https://www.mediawiki.org/wiki/Project:General_disclaimer	200
Discussion	/wiki/Talk:MediaWiki	1	https://www.mediawiki.org/wiki/Talk:MediaWiki	200
Download	/wiki/Special:MyLanguage/Download	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Download	200
Download as PDF	/w/index.php?title=Special:DownloadAsPdf&page=download-screen	1	https://www.mediawiki.org/w/index.php?title=Special:DownloadAsPdf&page=MediaWiki&action=show-download-screen	200
EMWCon	/wiki/Special:MyLanguage/EMWCon_Spring_2023	1	https://www.mediawiki.org/wiki/Special:MyLanguage/EMWCon_Spring_2023	200
English	#	1	https://www.mediawiki.org/#	200
English	/wiki/Template:Main_page	1	https://www.mediawiki.org/wiki/Template:Main_page	200
errors and symptoms	/wiki/Special:MyLanguage/Manual:Errors_and_symptoms	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Errors_and_symptoms	200
español	https://www.mediawiki.org/wiki/Template:Main_page/es	1	https://www.mediawiki.org/wiki/Template:Main_page/es	200
extensions	/wiki/Special:MyLanguage/Manual:Extensions	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Extensions	200

Text	Url	Freq	Final_Url	Status_Code
FAQ	/wiki/Special:MyLanguage/Manual:FAQ	2	https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:FAQ	200
Find out more	/wiki/Special:MyLanguage/Manual:What_is_MediaWiki%3F	3	https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:What_is_MediaWiki%3F	200
français	https://www.mediawiki.org/wiki/Template:Main_page/fr	1	https://www.mediawiki.org/wiki/Template:Main_page/fr	200
free and open	https://en.wikipedia.org/wiki/FLOSS	1	https://en.wikipedia.org/wiki/FLOSS	200
Get extensions	/wiki/Special:MyLanguage/Category:Extensions	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Category:Extensions	200
Get involved	/wiki/Special:MyLanguage/How_to_contribute	1	https://www.mediawiki.org/wiki/Special:MyLanguage/How_to_contribute	200
Get MediaWiki	/wiki/Download	1	https://www.mediawiki.org/wiki/Download	200
Get professional development and consulting hosting services	/wiki/Special:MyLanguage/Professional_development_and_consulting_hosting_services	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Professional_development_and_consulting_hosting_services	200
hrvatski	https://www.mediawiki.org/wiki/Template:Main_page/hr	1	https://www.mediawiki.org/wiki/Template:Main_page/hr	200
https://www.mediawiki.org/w/index.php?title=MediaWiki&oldid=3878227	https://www.mediawiki.org/w/index.php?title=MediaWiki&oldid=3878227	1	https://www.mediawiki.org/w/index.php?title=MediaWiki&oldid=3878227	200
if MediaWiki is right for you	/wiki/Special:MyLanguage/Manual:Deciding_whether_to_use_a_wiki_as_your_website_type	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Deciding_whether_to_use_a_wiki_as_your_website_type	200
install	/wiki/Special:MyLanguage/Manual:Installation_guide	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Installation_guide	200
italiano	https://www.mediawiki.org/wiki/Template:Main_page/it	1	https://www.mediawiki.org/wiki/Template:Main_page/it	200
Jawa	https://www.mediawiki.org/wiki/Template:Main_page/jv	1	https://www.mediawiki.org/wiki/Template:Main_page/jv	200
Jump to content	#bodyContent	1	https://www.mediawiki.org/#bodyContent	200
Languages pages	/wiki/Category:Languages_pages	1	https://www.mediawiki.org/wiki/Category:Languages_pages	200
Learn how to edit a page	/wiki/Special:MyLanguage/Help:Editing_pages	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Help:Editing_pages	200
Learn how to navigate	/wiki/Special:MyLanguage/Help:Navigation	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Help:Navigation	200

Text	Url	Freq	Final_Url	Status_Code
learn more	/wiki/Help:Introduction	1	https://www.mediawiki.org/wiki/Help:Introduction	404
Learn more about reading, editing, and personal customization	/wiki/Special:MyLanguage/Help:Contents	2	https://www.mediawiki.org/wiki/Special:MyLanguage/Help:Contents	200
Log in	/w/index.php?title=Special:UserLogin&returnto=MediaWiki	2	https://www.mediawiki.org/w/index.php?title=Special:UserLogin&returnto=MediaWiki	200
magyar	https://www.mediawiki.org/wiki/Template:Main_page/hu	1	https://www.mediawiki.org/wiki/Template:Main_page/hu	200
Main page	/wiki/MediaWiki	1	https://www.mediawiki.org/wiki/MediaWiki	200
Main Page	/wiki/MediaWiki	1	https://www.mediawiki.org/wiki/MediaWiki	200
MediaWiki 1.35.10, 1.38.6 and 1.39.3 security releases	https://lists.wikimedia.org/hyperkitty/list/mediawiki-announce@lists.wikimedia.org/message/6UQBHI5FWLATD7QO7DI4YS54U7XSSLAN/	1	https://lists.wikimedia.org/hyperkitty/list/mediawiki-announce@lists.wikimedia.org/message/6UQBHI5FWLATD7QO7DI4YS54U7XSSLAN/	200
MediaWiki Stakeholders	/wiki/Special:MyLanguage/MediaWiki_Stakeholders%27_Group	1	https://www.mediawiki.org/wiki/Special:MyLanguage/MediaWiki_Stakeholders%27_Group	200
Meta-Wiki	https://meta.wikimedia.org/wiki/Main_Page	1	https://meta.wikimedia.org/wiki/Main_Page	200
Mirandés	https://www.mediawiki.org/wiki/Template:Main_page/mwl	1	https://www.mediawiki.org/wiki/Template:Main_page/mwl	200
Mobile view	//m.mediawiki.org/w/index.php?title=MediaWiki&mobileaction=toggle_view_mobile	1	https://m.mediawiki.org/w/index.php?title=MediaWiki&mobileaction=toggle_view_mobile	404
More news	https://www.mediawiki.org/wiki/Special:MyLanguage/News	1	https://www.mediawiki.org/wiki/Special:MyLanguage/News	200
multilingual	/wiki/Special:MyLanguage/Localisation	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Localisation	200
Multilingual Wikisource	https://wikisource.org/wiki/Main_Page	1	https://wikisource.org/wiki/Main_Page	200
Nederlands	https://www.mediawiki.org/wiki/Template:Main_page/nl	1	https://www.mediawiki.org/wiki/Template:Main_page/nl	200
Other languages:	/wiki/Special:MyLanguage/Project:Language_policy	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Project:Language_policy	200
Page information	/w/index.php?title=MediaWiki&action=info	1	https://www.mediawiki.org/w/index.php?title=MediaWiki&action=info	200
Permanent link	/w/index.php?title=MediaWiki&oldid=3878227	1	https://www.mediawiki.org/w/index.php?title=MediaWiki&oldid=3878227	200
polski	https://www.mediawiki.org/wiki/Template:Main_page/pl	1	https://www.mediawiki.org/wiki/Template:Main_page/pl	200
português	https://www.mediawiki.org/wiki/Template:Main_page/pt	1	https://www.mediawiki.org/wiki/Template:Main_page/pt	200

Text	Url	Freq	Final_Url	Status_Code
português do Brasil	https://www.mediawiki.org/wiki/Template:Main_page/pt-br	1	https://www.mediawiki.org/wiki/Template:Main_page/pt-br	200
Printable version	/w/index.php?title=MediaWiki&printable=yes	1	https://www.mediawiki.org/w/index.php?title=MediaWiki&printable=yes	200
Privacy policy	https://foundation.wikimedia.org/wiki/Privacy_policy	1	https://foundation.wikimedia.org/wiki/Privacy_policy	200
Random page	/wiki/Special:Random	1	https://www.mediawiki.org/wiki/Special:Random	200
Read	/wiki/MediaWiki	2	https://www.mediawiki.org/wiki/MediaWiki	200
Recent changes	/wiki/Special:RecentChanges	1	https://www.mediawiki.org/wiki/Special:RecentChanges	200
Related changes	/wiki/Special:RecentChangesLinked/MediaWiki	1	https://www.mediawiki.org/wiki/Special:RecentChangesLinked/MediaWiki	200
Report wrong software behavior or a feature proposal	/wiki/Special:MyLanguage/How_to_report_a_bug	1	https://www.mediawiki.org/wiki/Special:MyLanguage/How_to_report_a_bug	200
română	https://www.mediawiki.org/wiki/Template:Main_page/ro	1	https://www.mediawiki.org/wiki/Template:Main_page/ro	200
Sandbox	/wiki/Project:Sandbox	1	https://www.mediawiki.org/wiki/Project:Sandbox	200
sardu	https://www.mediawiki.org/wiki/Template:Main_page/sc	1	https://www.mediawiki.org/wiki/Template:Main_page/sc	200
Search	/wiki/Special:Search	1	https://www.mediawiki.org/wiki/Special:Search	200
shqip	https://www.mediawiki.org/wiki/Template:Main_page/sq	1	https://www.mediawiki.org/wiki/Template:Main_page/sq	200
slovenčina	https://www.mediawiki.org/wiki/Template:Main_page/sk	1	https://www.mediawiki.org/wiki/Template:Main_page/sk	200
slovenščina	https://www.mediawiki.org/wiki/Template:Main_page/sl	1	https://www.mediawiki.org/wiki/Template:Main_page/sl	200
Soomaaliga	https://www.mediawiki.org/wiki/Template:Main_page/so	1	https://www.mediawiki.org/wiki/Template:Main_page/so	200
Special pages	/wiki/Special:SpecialPages	1	https://www.mediawiki.org/wiki/Special:SpecialPages	200
Statistics	https://stats.wikimedia.org/#/www.mediawiki.org	1	https://stats.wikimedia.org/#/www.mediawiki.org	200
suomi	https://www.mediawiki.org/wiki/Template:Main_page/fi	1	https://www.mediawiki.org/wiki/Template:Main_page/fi	200
support desk	/wiki/Project:Support_desk	1	https://www.mediawiki.org/wiki/Project:Support_desk	200
Support desk	/wiki/Project:Support_desk	1	https://www.mediawiki.org/wiki/Project:Support_desk	200
svenska	https://www.mediawiki.org/wiki/Template:Main_page/sv	1	https://www.mediawiki.org/wiki/Template:Main_page/sv	200
Talk	/wiki/Special:MyTalk	1	https://www.mediawiki.org/wiki/Special:MyTalk	200
Tech blog	//techblog.wikimedia.org/	1	https://www.mediawiki.org/techblog.wikimedia.org/	404

Text	Url	Freq	Final_Url	Status_Code
Technical manual	/wiki/Special:MyLanguage/Manual:Contents	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Manual:Contents	200
tens of thousands of websites	/wiki/Special:MyLanguage/Sites_using_MediaWiki	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Sites_using_MediaWiki	200
Terms of Use	https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Terms_of_Use	1	https://foundation.wikimedia.org/wiki/Special:MyLanguage/Policy:Terms_of_Use	200
thousands of companies and organizations	/wiki/Special:MyLanguage/MediaWiki_testimonials	1	https://www.mediawiki.org/wiki/Special:MyLanguage/MediaWiki_testimonials	200
Tiếng Việt	https://www.mediawiki.org/wiki/Template:Main_page/vi	1	https://www.mediawiki.org/wiki/Template:Main_page/vi	200
Translate content	/wiki/Special:LanguageStats	1	https://www.mediawiki.org/wiki/Special:LanguageStats	200
Türkçe	https://www.mediawiki.org/wiki/Template:Main_page/tr	1	https://www.mediawiki.org/wiki/Template:Main_page/tr	200
Upload file	//commons.wikimedia.org/wiki/Special:UploadWizard	1	https://www.mediawiki.org/wiki/Special:UploadWizard	404
User help	/wiki/Special:MyLanguage/Help:Contents	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Help:Contents	200
View history	/w/index.php?title=MediaWiki&action=history	2	https://www.mediawiki.org/w/index.php?title=MediaWiki&action=history	200
View livestream	https://www.youtube.com/watch?v=r0xEhy9bBFU	1	https://www.youtube.com/watch?v=r0xEhy9bBFU	200
View source	/w/index.php?title=MediaWiki&action=edit	2	https://www.mediawiki.org/w/index.php?title=MediaWiki&action=edit	200
Village pump	/wiki/Project:Village_Pump	1	https://www.mediawiki.org/wiki/Project:Village_Pump	200
What links here	/wiki/Special:WhatLinksHere/MediaWiki	1	https://www.mediawiki.org/wiki/Special:WhatLinksHere/MediaWiki	200
Wikibooks	https://en.wikibooks.org/wiki/Main_Page	1	https://en.wikibooks.org/wiki/Main_Page	200
Wikidata	https://www.wikidata.org/wiki/Wikidata:Main_Page	1	https://www.wikidata.org/wiki/Wikidata:Main_Page	200
Wikidata item	https://www.wikidata.org/wiki/Special:EntityPage/Q5296	1	https://www.wikidata.org/wiki/Special:EntityPage/Q5296	200
Wikimania	https://wikimania.wikimedia.org/wiki/Wikimania	1	https://wikimania.wikimedia.org/wiki/Wikimania	200
Wikimedia Commons	https://commons.wikimedia.org/wiki/Main_Page	1	https://commons.wikimedia.org/wiki/Main_Page	200
Wikimedia Developer Portal	https://developer.wikimedia.org	1	https://developer.wikimedia.org	200
Wikimedia Hackathon	/wiki/Special:MyLanguage/Wikimedia_Hackathon_2023	1	https://www.mediawiki.org/wiki/Special:MyLanguage/Wikimedia_Hackathon_2023	200
Wikinews	https://en.wikinews.org/wiki/Main_Page	1	https://en.wikinews.org/wiki/Main_Page	200



Text	Url	Freq	Final_Url	Status_Code
Wikipedia	https://en.wikipedia.org/wiki/ Main_Page	1	https://en.wikipedia.org/wiki/ Main_Page	200
Wikiquote	https://en.wikiquote.org/wiki/ Main_Page	1	https://en.wikiquote.org/wiki/ Main_Page	200
Wikisource	https://en.wikisource.org/wiki/ Main_Page	1	https://en.wikisource.org/wiki/ Main_Page	200
Wikispecies	https://species.wikimedia.org/wiki/ Main_Page	1	https://species.wikimedia.org/wiki/ Main_Page	200
Wikiversity	https://en.wikiversity.org/wiki/ Wikiversity:Main_Page	1	https://en.wikiversity.org/wiki/ Wikiversity:Main_Page	200
Wikivoyage	https://en.wikivoyage.org/wiki/ Main_Page	1	https://en.wikivoyage.org/wiki/ Main_Page	200
Wiktionary	https://en.wiktionary.org/wiki/ Wiktionary:Main_Page	1	https://en.wiktionary.org/wiki/ Wiktionary:Main_Page	200
( )	https://www.mediawiki.org/wiki/ Template:Main_page/be	1	https://www.mediawiki.org/wiki/ Template:Main_page/be	200
	https://www.mediawiki.org/wiki/ Template:Main_page/be-tarask	1	https://www.mediawiki.org/wiki/ Template:Main_page/be-tarask	200
	https://www.mediawiki.org/wiki/ Template:Main_page/bg	1	https://www.mediawiki.org/wiki/ Template:Main_page/bg	200
	https://www.mediawiki.org/wiki/ Template:Main_page/kk	1	https://www.mediawiki.org/wiki/ Template:Main_page/kk	200
	https://www.mediawiki.org/wiki/ Template:Main_page/ru	1	https://www.mediawiki.org/wiki/ Template:Main_page/ru	200
	/ srpski https://www.mediawiki.org/wiki/ Template:Main_page/sr	1	https://www.mediawiki.org/wiki/ Template:Main_page/sr	200
	https://www.mediawiki.org/wiki/ Template:Main_page/uk	1	https://www.mediawiki.org/wiki/ Template:Main_page/uk	200
	https://www.mediawiki.org/wiki/ Template:Main_page/hy	1	https://www.mediawiki.org/wiki/ Template:Main_page/hy	200
	https://www.mediawiki.org/wiki/ Template:Main_page/he	1	https://www.mediawiki.org/wiki/ Template:Main_page/he	200
	https://www.mediawiki.org/wiki/ Template:Main_page/ar	1	https://www.mediawiki.org/wiki/ Template:Main_page/ar	200
	https://www.mediawiki.org/wiki/ Template:Main_page/fa	1	https://www.mediawiki.org/wiki/ Template:Main_page/fa	200
	https://www.mediawiki.org/wiki/ Template:Main_page/ckb	1	https://www.mediawiki.org/wiki/ Template:Main_page/ckb	200
	https://www.mediawiki.org/wiki/ Template:Main_page/hi	1	https://www.mediawiki.org/wiki/ Template:Main_page/hi	200
	https://www.mediawiki.org/wiki/ Template:Main_page/bn	1	https://www.mediawiki.org/wiki/ Template:Main_page/bn	200
	https://www.mediawiki.org/wiki/ Template:Main_page/gu	1	https://www.mediawiki.org/wiki/ Template:Main_page/gu	200
	https://www.mediawiki.org/wiki/ Template:Main_page/si	1	https://www.mediawiki.org/wiki/ Template:Main_page/si	200
	https://www.mediawiki.org/wiki/ Template:Main_page/th	1	https://www.mediawiki.org/wiki/ Template:Main_page/th	200
	https://www.mediawiki.org/wiki/ Template:Main_page/ko	1	https://www.mediawiki.org/wiki/ Template:Main_page/ko	200
	https://www.mediawiki.org/wiki/ Template:Main_page/zh	1	https://www.mediawiki.org/wiki/ Template:Main_page/zh	200

Text	Url	Freq	Final_Url	Status_Code
	https://www.mediawiki.org/wiki/Template:Main_page/ja	1	https://www.mediawiki.org/wiki/Template:Main_page/ja	200
	https://www.mediawiki.org/wiki/Template:Main_page/yue	1	https://www.mediawiki.org/wiki/Template:Main_page/yue	200

```
cat("Proceso terminado \n")
```

```
## Proceso terminado
```

## Pregunta 2

1. Un histograma con la frecuencia de aparición de los enlaces, pero separado por URLs absolutas (con "http...") y URLs relativas.

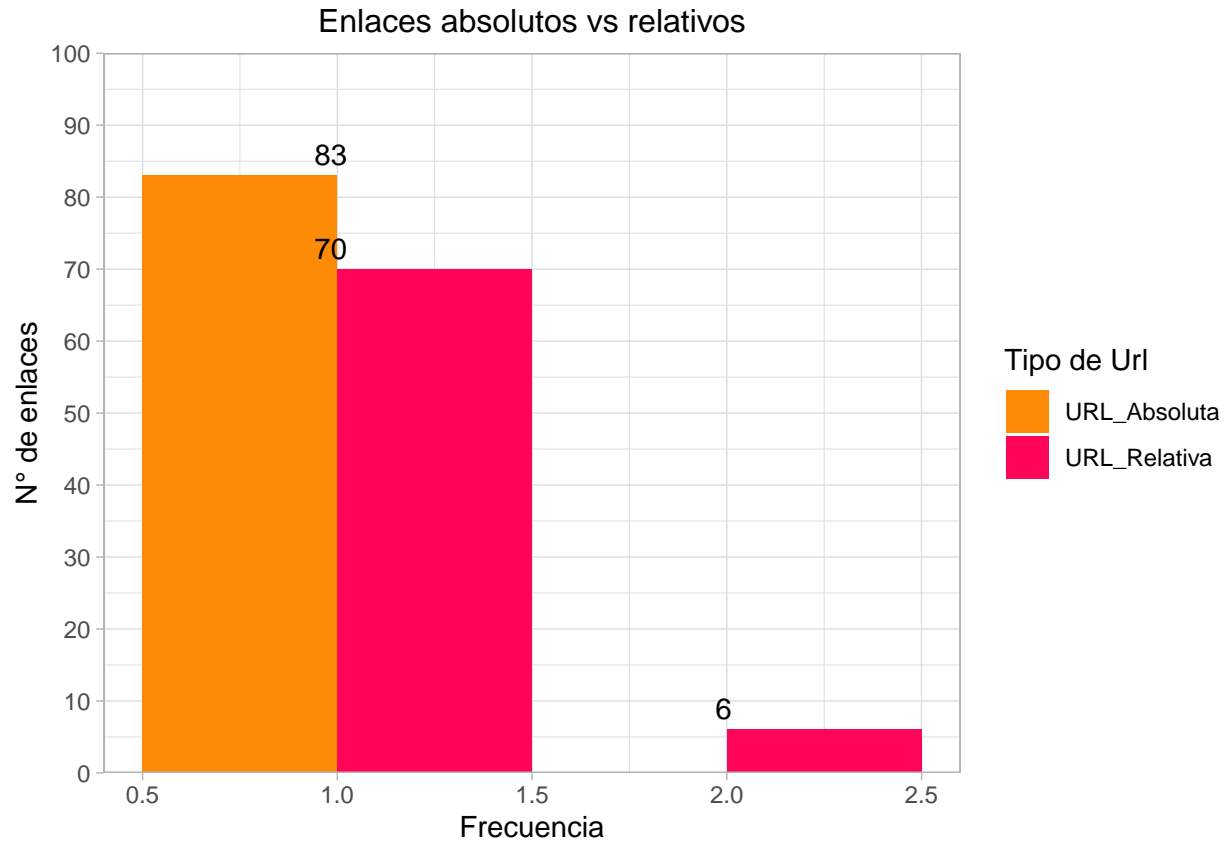
### Resolución:

Para esta pregunta se creó una nueva columna llamada **Url\_type** donde se valida si hay enlaces absolutas o relativas con la función **grepl()**. Luego se utiliza la función **ggplot()** y **geom\_histogram()** para mostrar el histograma, el cual el n° de enlaces está en el eje Y y la frecuencia en el eje x. Lo mencionado se encuentra el siguiente código.

```
# Validando si la URL es absoluta o relativa
links_data$Url_type <- ifelse(grepl("^http", links_data$Url), "URL_Absoluta", "URL_Relativa")

# Agregando la gráfica histograma general
histogram <- ggplot(links_data, aes(x=Freq)) +
  geom_histogram(aes(fill=Url_type),
    binwidth = 1,
    position = "dodge") +
  # Cambiando el nombre de la leyenda
  scale_fill_manual(values=c("#fe8b05", "#fe0557"), name = "Tipo de Url") +
  # Incorporando los nombres para los ejes x y y, y el título del gráfico
  labs(x = "Frecuencia", y = "N° de enlaces", title = "Enlaces absolutos vs relativos") +
  # Escala del número de enlaces
  scale_y_continuous(limits = c(0, 100),
    breaks = seq(0, 100, 10),
    expand = c(0, 0)) +
  # Creando fondo con líneas de cuadrícula
  theme_light() +
  # Ajustando la ubicación del título
  theme(plot.title = element_text(hjust = 0.5, size = 12)) +
  # Incorporando valores a cada barra
  geom_text(aes(x = Freq, y = ..count.., label = ..count.., group = Url_type),
    stat = "count", vjust = -0.5, hjust = 0.7, size = 4)

# Mostrando el histograma
grid.arrange(histogram, ncol = 1)
```



- Un gráfico de barras indicando la suma de enlaces que apuntan a otros dominios o servicios (distinto a <https://www.mediawiki.org> en el caso de ejemplo) vs. la suma de los otros enlaces.

### Resolución:

Se realizó la validación con el dominio “<https://www.mediawiki.org>” para determinar si la url es externa o interna y se incorporó una nueva columna llamada **Domain\_Type** con los valores. Luego se determinó el n° de repeticiones con la función `table()` y con la función `ggplot()` y `geom_bar()` para mostrar el gráfico de barras, el cual en el eje x tiene los tipos de dominio y en el eje y la cantidad. Todo ello se realizó con el siguiente código.

```
# Añadiendo si el link es interno o externo
links_data$Domain_Type <- ifelse(grepl("^https://www.mediawiki.org", links_data$Final_Url), "Interno", "Externo")

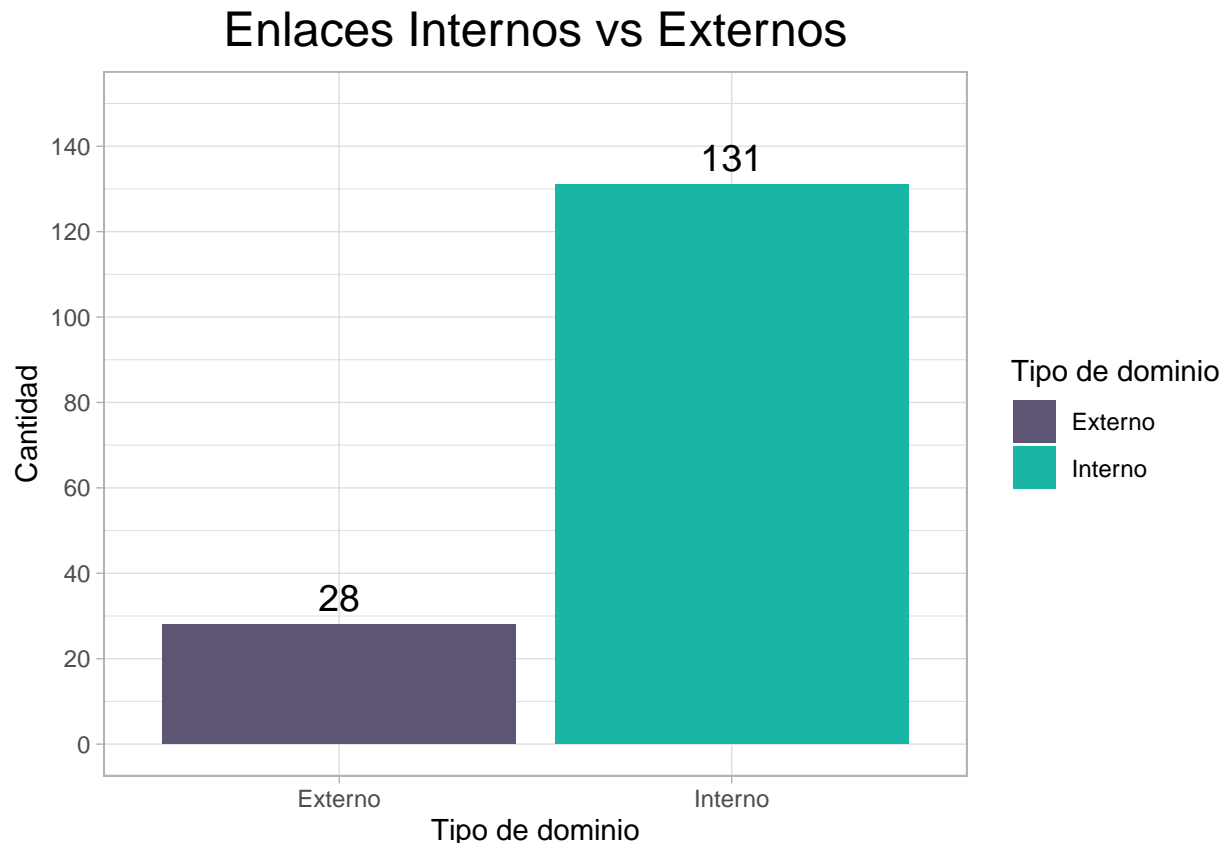
# Hallando la frecuencia
freq_link <- table(links_data$Domain_Type)

# Mostrando gráfica de barras
# Dibujando la gráfica en base al tipo de dominio si es externo o interno y su cantidad
bar_graphic <- ggplot(data.frame(Domain_Type = names(freq_link), count = as.numeric(freq_link)), aes(x=Domain_Type, y=count)) +
  # Creación del gráfico de barras
  geom_bar(stat="identity") +
  # Títulos para los ejes x e y, y el título de la gráfica
  labs(title="Enlaces Internos vs Externos", x="Tipo de dominio", y="Cantidad") +
  theme_light()
```

```

# Cambiando el nombre de la leyenda
scale_fill_manual( name = "Tipo de dominio", values = c("#5e5473", "#19b5a5")) +
scale_y_continuous(limits = c(0, 150), breaks = seq(0, 150, 20)) +
# Incorporando valores en cada barra
geom_text(aes(label=count), vjust=-0.5, size=5) +
# Ajustando ubicación del título
theme(plot.title = element_text(hjust = 0.5, size = 18))
# Mostrando la gráfica
grid.arrange(bar_graphic, ncol=1)

```



3. Un gráfico de tarta (pie chart) indicando los porcentajes de Status de nuestro análisis.

### Resolución:

Para este gráfico es necesario hallar los porcentajes se utiliza la función **prop.table()** y **round()**. Luego se utiliza las funciones **ggplot()** y **geom\_bar()** para el gráfico respectivo. Todo ello se encuentra en el siguiente código con su respectivo detalle.

```

# Hallando la frecuencia del status_code
code_freq <- table(links_data$Status_Code)
# Hallando el porcentaje en % ( 0.9 a 90%)
percentage_value <- round(prop.table(code_freq) * 100, 2)
percentage_value <- as.numeric(rounded_percentage_value)
# data
code_data <- data.frame(Status_Code = names(code_freq), Percentage = percentage_value)

# Mostrando pie chart

```

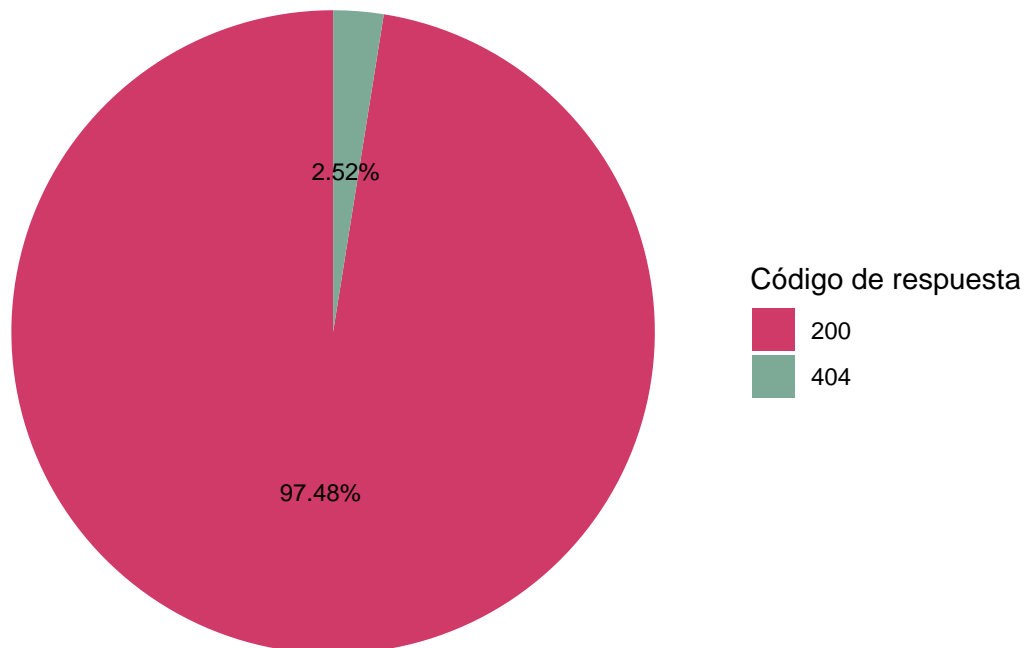
```

chart_graphic <- ggplot(code_data, aes(x="", y=Percentage, fill=Status_Code)) +
  # Gráfico chart pie
  geom_bar(width = 1, stat = "identity") +
  coord_polar("y", start=0) +
  # Título del gráfico
  ggtitle("Códigos de estados de respuesta") +
  theme_void() +
  # Incorporando los porcentajes
  geom_text(aes(label = paste0(Percentage, "%")), position = position_stack(vjust = 0.5), size = 3) +
  # Nombre de la leyenda y colores del gráfico
  scale_fill_manual(name = "Código de respuesta", values=c("#cf3a69", "#7caa96")) +
  # Ubicación del título
  theme(plot.title = element_text(hjust = 0.5, vjust = 1, size = 18))

# Mostrando la gráfica
grid.arrange(chart_graphic, ncol=1)

```

## Códigos de estados de respuesta

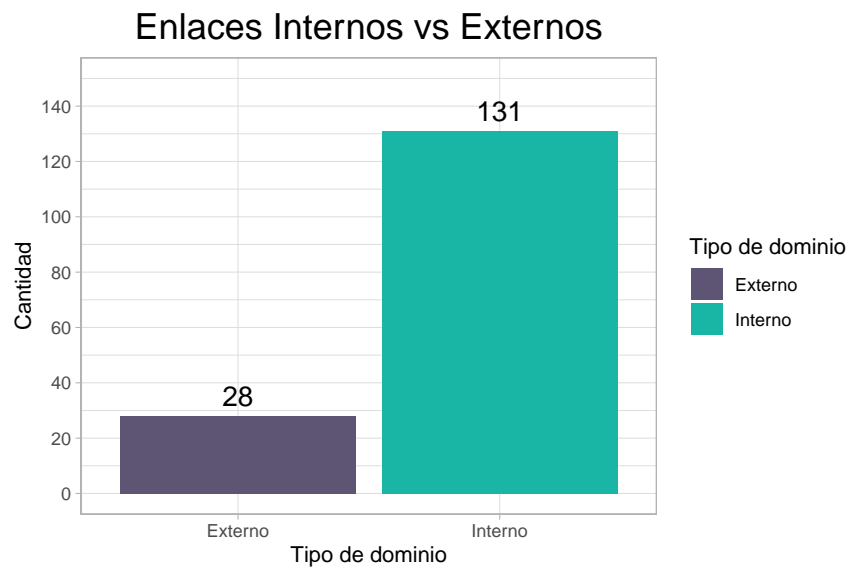
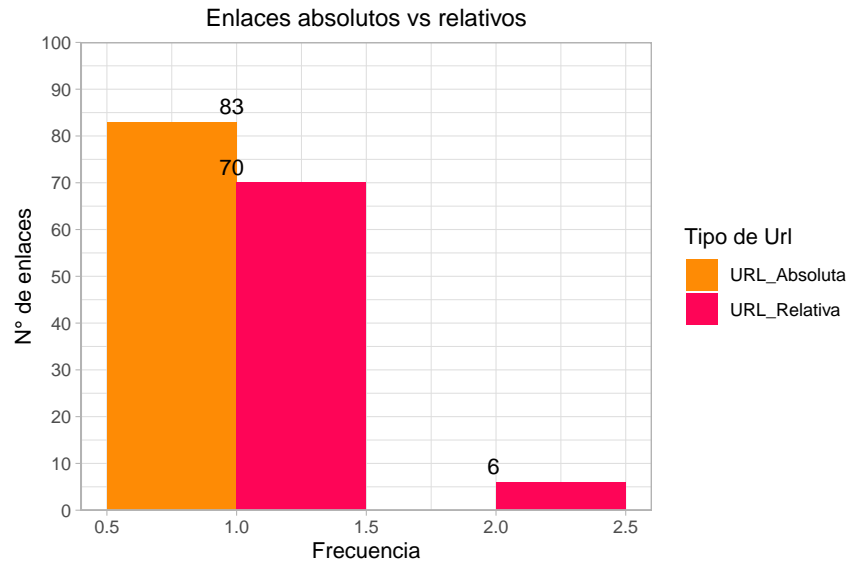


Para mostrar los gráficos en uno solo, se usa la función `grid.arrange()`

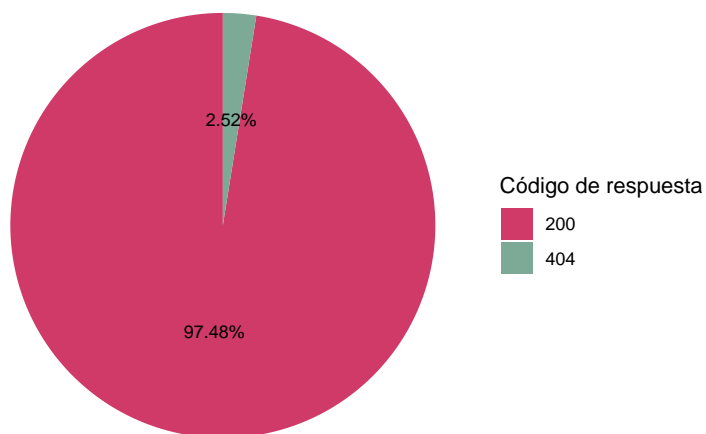
```

# Mostrando las tres gráficas en una sola figura
grid.arrange(histogram, bar_graphic, chart_graphic, ncol=1)

```



### Códigos de estados de respuesta



```
cat("Fin\n")
```

```
## Fin
```

```
# Visualización de la tabla final  
View(links_data)
```