



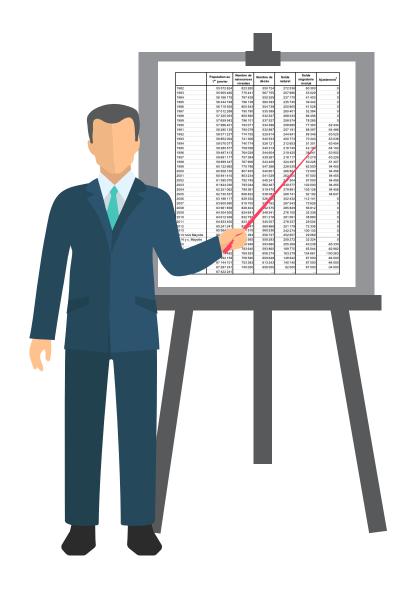
### THE

CORRELATIONS AND HOSPITAL MANAGEMENT

You may have noticed hospital management is a HOT topic nowadays.

To handle more efficiently their material needs and their human resources, a large association of hospitals aims at predicting maternity occupation rates and put in place an alerting system to help decision-making.

Many factors could influence pregnancy and natality, from weather conditions to football results, through travel agencies activity. There are so many variables that could be taken into consideration, that the association decided to limit them to twitter hashtags at first.



### DATASET

A data set (or dataset) is a collection of data. In the case of tabular data, a data set corresponds to one or more database tables, where every column of a table represents a particular variable, and each row corresponds to a given record of the data set in question.

free and confidential service aimed at providing comprehensive services. SSCORe Premoir PParenthood Especialneeds Eparenting Emotherhood Flamily EASMSG FIARI FI ARTG Epofi EGoodreads Flook Febook EKindleUnlimited https://t.co/zGure657E9 1154773435840643072 2019-07-26 17:20:16 +0100 <Cerinni Manmas is onvervangbaar. # PMon t.co/eh]cI7ypQy 1848538395858438464 2018-10-06 13;40:08 +0100 <DaisySheffNorth> dd@ #parenting #paren ternathealth #pregnancy (2/5) 288886657915531270 2020-07-00 17:29:11 +0100 <CoolDealCA> #Pregnancy Pillow for \$34.99 tingtheshitoutoflife #unsolicitedparentingadvice #mumalife #pregnant #pregnancy #daisytoundationsheffieldnorth https://t.co/j19kBtQVlo 1848538288422838273 2018-18-06 13:39:43 :0100 Pregnancy TT> Understanding the Risks of #Deal #ganga https://t.co/#b2dZxsH4 https://t.co/ZyJHLhxidS 2008H6372161794848 2020-07-88 17:28:03 +0100 <\rangle etallealth> What is #endometriosis and Life #Mom #Mum #Motherhood #MomBlogger https://t.co/aDMEXIOTHK 1154772961955590152 2019-97-26 17:18:23 +0100 <DiscolemonAid> Takeing twins to a 2 year ow can it affect #pregnancy ?? https://t.co/zCKSSXYwIk https://t.co/weZCh1089Z a Plus-Size Pregnancy /Pregnancy https://t.co/p06g186n9g 1848537972784726017 2018-10-06 13:38:28 +0100 </www.duspScrap> "When I set hubby he made well check at Bam., rather have myperiod at a water park then to do that again! Led tes 200885809267367936 2020-07-08 17:26:08 +0100 -HallelujahStudi> Ask se for perfect preg t, eyetest and fluoride all solo #twinlife #twinmon #motherhood mcy portrait 👩 Esydneypregnancy Epregnant Epregnancy Epregnancyshoot Esydneyphotosho #a7riii Esonyalpha Esony85mm18 Esonyphotography Esonyalpho7riii https://t.co/Cxov49 1154771367163813889 2019-07-26 17:12:83 +0100 <TinyDoodleShop> #motherhood #kidscare Lit tle Dreamer Fox T-shirt Top + Pants Outfits https://t.co/cPR0txzIYD 1154768336728412672 2019-07-26 17:00:00 +0100 <mlembarazo col> Tranquilo, te la va a dev 085018248777730 2020-07-08 17:22:40 +0100 <MtranParker> @DeltaChildren YOU WILL NEV olver P Para saber mis sobre maternidad y crianza afectiva, visitanos en: Thttps://t.co/kriaryilayijazr t.co/lweiyes/Zog Fmaternidad Fmatherhood Fcrianza https://t.co/kriaryilayijazr 1154767833869574149 2019-07-26 16:58:00 +0100 <Ismotherhooddem> "It's about the journey, not the destination." Some women find that true when deciding Fmotherhood or Schildfree GET YOUR ORDER. My order was placed Memorial Day, delivery was canceled TWICE, and comer service is unreachable. My baby is in the NICU and coming home in a few days. We is he poing to sleep? Amedorn Apregnancy Amemon Aparenting Amursery 6884267715719175 2020-07-88 17:19:41:0100 genderequity4al> Access to ASDUM is essent for Amemon Aparenting Amursery 0884267715719175 2020-07-88 17:19:41:0100 genderequity4al> Access to ASDUM is essent for Amemon Aparenting Amursery 0884267715719175 2020-07-88 17:18:55:0100 genderequity4al> Access to ASDUM is essent for Amemon Ame 1154767562451898177 2019-07-26 16:56:56 +0100 conaronBrooks> Few things have brought ou r family more joy than planting a butterfly garden with drought tolerant plants # #mothe rhood #butterfly #garden #SanAntonio #Texas #SANS #mindful https://t.co/156zmWLXX4 1154767054563680256 2019-07-26 16:54:54 +0100 «KatyFerry» So I wrote a piece on @Medium. us to see what lasting impacts #COVID-19 responses will have on #birthdefects surve nce and what we know about how #viral infections affect #pregnancy. 🥚 I hope y'all will check it out, Gamp; if you like it, clap for it, or share it. It's a bt anxiety, motherhood, working Gamp; self-induced pressures. My Life Is So Good It's Bad https://t.co/sbulgFJXDE #anxiety #MentalHealth/wareness #motherhood 1154764631082229760 2019-07-26 16:45:17 +0100 <RezaCl> HATCH Roised \$5M For its Stylish ience with us? Please read below and get in touch, thank you mun #mumlife #Covid19 ockdown #baby #pregnant #pregnancy @nhsbame @BAMEedNetwork @PMHfamilies #PND http .co/YBShXap6t4 Approach to Motherhood That Celebs Love https://t.co/2fm75hosLD via @AlleyWatch #tech 82109763121154 2020-07-08 17:11:07 +0100 <GGHospital> Health Benefits of Mushroom! 1154763307942850560 2019-07-26 16:40:01 +0100 <kkupiecki> Motherhood is: Being sleep-dep Appointments, Call 044-28272675 / 9962229940 Visit us @ https://t.co/9u80278P5G rived and still getting Media #momlife #mothe spital #Fertility #Pregnancy #Chennai https://t.co/8Cnrboo7Rn rhood https://t.co/rQt 58 kB+ O 22% Re 1.5 MB4 58 kB+ build strength for your #pregnancy and delivery from @fitpregnancy https://t.co ZMG0 https://t.co/dbpCG0TpDd ttps://t.co/34xqQu4wCI 34649989123 2017-11-24 17:00:02 +0100 <mybabyway> Nothing like a #babyshower to 3931168155 he whole #family together: https://t.co/vytJVbJ8YL #FriYaY #pregnancy #30weeks uring #Pr cylife 0450959361 2017-11-24 16:58:33 +0100 <SwagBabyDecor> Like and share! #momideas 9917833 #portrait ncy https://t.co/mYjl67YLdB nity # rtrait 7541571584 2017-11-24 16:55:29 +0100 <GioBellaMerch> Womens Mama Bird T-Shirt M 803537535922118656 2016-11-29 other Grey https://t.co/whyb8gDCeD #momlife #Motherhood #mamabird #mother #pre pirds #momsrock #loveit https://t.co/9LLgCfeoya Mormal - The Truth About Postpartum Urinary Incontinence https://t.co/5zXXuCunIp #pregn ancy #fitness 071090176 2017-11-24 16:54:16 +0100 ortlesoup> Yayy! #pregnancy #babies #cel 803534970677391361 2016-11-29 10:44:00 +0100 <Talking mums> My journey to parenthood! Li cy https://t.co/C6u9cXq9K0 nked up with #EatSleepBlogRT https://t.co/r25AfxpRne thanks @petite pudding @animperfec

To make my datasets from the Twitter feed I had to use a scraper.

But what is a scraper?

t no secret he would like three children.\* https://t.co/c078380069 #Gender #Pregnancy https://t.co/IEbl8Ahf2a 1848537499783483528 2018-10-86 13:36:14 +8180 <InEOPY> スタバでスルーされた。なぜだろう。 ハラスメントなのか? スタハラか? でもイケメン・だったから許す。また行きます。 ま元 名 ま笑前 #日記 まイラスト #語書き まイケメン まart parts pillustration pinkprinting #おか #家族 Phappy #子育で #出来 #思い出 #pregnancy #starbucks #スタパ #出来 https://t.c LGGbSFR9XS 1048537281164992513 2018-10-06 13:35:43 +0100 <matteolambe> Terrific talk of my great iend Hatem at #BCYlugano on biology of #BreastCancer in young patients and on the very ecent data published by @bastien\_nguyen and @c\_sotiriou on the impact of #pregnancy ( ortant work supported by @BCRFcure) #bcsm https://t.co/xabGeqCBCl 1048537123790491648 2018-10-06 13:35:05 +0100 <Treasure E M- PREGMANCY #2: Tips for S iving the First Trimester - looking after a toddler while in those early months of pr ancy is such a difficult time. These are my ways to make it easier... https://t.co/ 0jnu3M #pbloggers #pregnancy https://t.co/b0xJf4cVme 104853676637707078786 2018-10-06 13:33:48 +0100 <0Cerebusfire17> Sorry I haven't tweet or is it twated???) too much. I just found out I'm pregnant last Sunday and I've bee my head preparing for having the chance to be a mother again:) #mommytobe #pregnan regnancy #Rainbow/Baby https://t.co/kDuILr4SoV 1048536094176768801 2018-10-06 13:31:00 +0100 </br> પોતાની કૂખલાલોલા તને રાખે છે https://t.co/7TVQog)7E6 #pregnancy #motherhood □ 22% **-**P. 15 MBL tps://t.co/efG220myFq 671020852226297856 2015-11-29 18:40:12 +0100 <AlFatimaClinic> #alfatimaclinic #obg dy #doctor #specialist #maternityhome #karachi #Walkin #Pregnancy #Maternity #Labo tps://t.co/b8cHypygAK 671020851949531136 2015-11-29 18:40:12 +0100 <AlfatimaClinic> #alfatimaclinic #ob

dy #doctor #specialist #maternityhome #karachi #Walkin #Pregnancy #Maternity #Lab tps://t.co/zlj07dK59h 671020851589492480 2015-11-29 18:40:12 +0100 <AlFatimaClinic> #alfatimaClinic #ot dy #doctor #specialist #maternityhome #karachi #Walkin #Pregnancy #Maternity #Lal tps://t.co/90htE70gYd 671020050770907136 2015-11-29 18:40:12 +0100 <A\Fatimaclinic> #alfatimaclinic #o

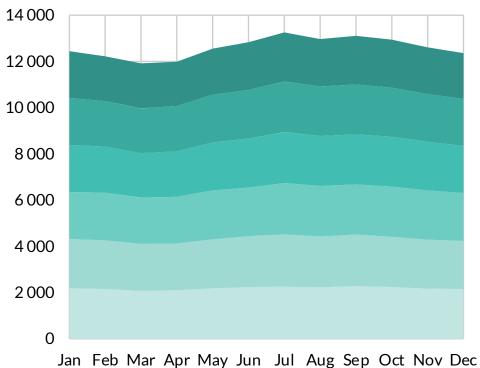


### SCRAPER

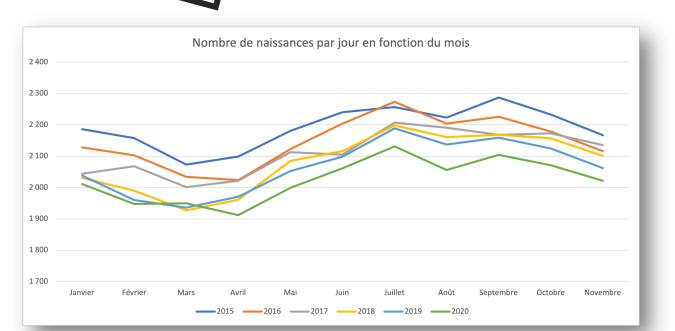
Web scraping, web harvesting, or web data extraction is data scraping used for extracting data from websites. The web scraping software may directly access the World Wide Web using the Hypertext Transfer Protocol or a web browser.

### DATA VISUALIZATION

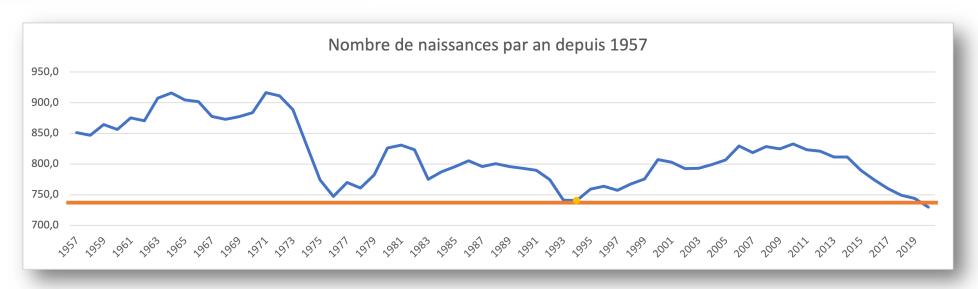
Data visualization is the graphical representation of information and data. By using visual elements like charts, graphs, and maps, data visualization tools provide an accessible way to see and understand trends, outliers, and patterns in data.

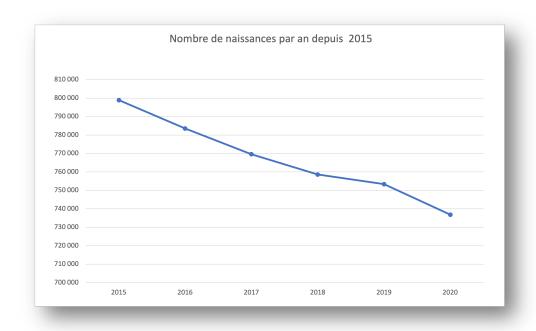


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# EVOLUTION OF NUMBER OF BIRTHS

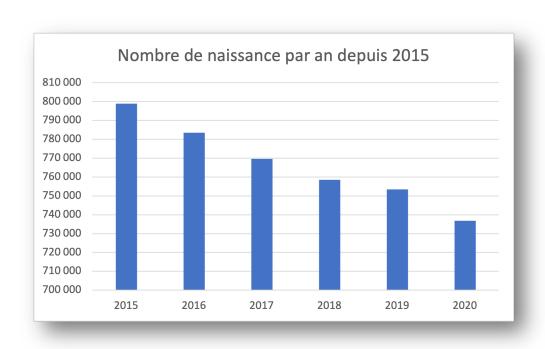


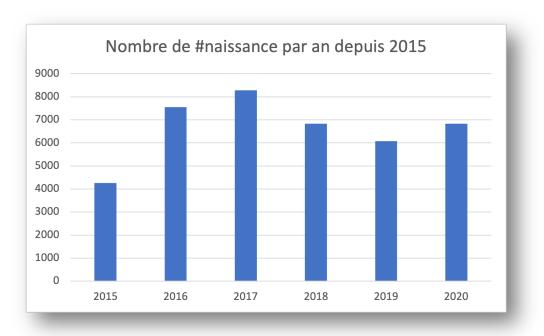


# EVOLUTION OF NUMBER OF BIRTHS

	Depuis	Depuis	De 2014	De 2015	De 2016	De 2017	De 2018	De 2019
	1957	2015	à 2015	à 2016	à 2017	à 2018	à 2019	à 2020
Taux de Diminution des naissances	-14%	-8%	-2%	-1%	-1%	-2%	-2%	-3%

#### REALITY VS. TWITTER





### SOURCES

Here are all the sources that helped me in my research to establish my case study

Bilan démographique 2020

https://www.insee.fr/fr/statistiques/5012724#figure2\_radio2

Naissances et taux de natalité

https://www.insee.fr/fr/statistiques/2381380#tableau-figure1

Décalage du pic de naissance

https://www.insee.fr/fr/statistiques/4655279#graphique-figure1

Infos juillet 2019

https://www.lefigaro.fr/actualite-france/les-infos-qu-il-faut-

retenir-du-mois-de-juillet-20190802

Bilan démographique 2016

https://www.insee.fr/fr/statistiques/2554860





### THANKS FOR YOUR ATTENTION