

Analysis_LoL

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R Markdown

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When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(Lol_match_data_2022)
```

```
##      gameid      datacompleteness      url      league
## Length:30528      Length:30528      Length:30528      Length:30528
## Class :character      Class :character      Class :character      Class :character
## Mode  :character      Mode  :character      Mode  :character      Mode  :character
##
##
##
##      year      split      playoffs      date
## Min.   :2022      Length:30528      Min.   :0.00000      Length:30528
## 1st Qu.:2022      Class :character      1st Qu.:0.00000      Class :character
## Median :2022      Mode  :character      Median :0.00000      Mode  :character
## Mean   :2022
## 3rd Qu.:2022
## Max.   :2022
##
##      game      patch      participantid      side
## Min.   :1.000      Min.   :12.01      Min.   : 1.00      Length:30528
## 1st Qu.:1.000      1st Qu.:12.01      1st Qu.: 3.75      Class :character
## Median :1.000      Median :12.02      Median : 6.50      Mode  :character
## Mean   :1.184      Mean   :12.02      Mean   :29.58
## 3rd Qu.:1.000      3rd Qu.:12.03      3rd Qu.: 9.25
## Max.   :4.000      Max.   :12.04      Max.   :200.00
##
##      NA's :24
##      position      playername      playerid      teamname
## Length:30528      Length:30528      Length:30528      Length:30528
## Class :character      Class :character      Class :character      Class :character
## Mode  :character      Mode  :character      Mode  :character      Mode  :character
##
##
##
```

```

##
##      teamid      champion      ban1      ban2
## Length:30528    Length:30528    Length:30528    Length:30528
## Class :character Class :character Class :character Class :character
## Mode  :character Mode  :character Mode  :character Mode  :character
##
##
##
##      ban3      ban4      ban5      gamelength
## Length:30528    Length:30528    Length:30528    Min.   : 938
## Class :character Class :character Class :character 1st Qu.:1681
## Mode  :character Mode  :character Mode  :character Median :1883
##                                           Mean  :1920
##                                           3rd Qu.:2119
##                                           Max.   :3577
##
##      result      kills      deaths      assists
## Min.   :0.0      Min.   : 0.000      Min.   : 0.00      Min.   : 0.00
## 1st Qu.:0.0      1st Qu.: 1.000      1st Qu.: 2.00      1st Qu.: 3.00
## Median :0.5      Median : 3.000      Median : 3.00      Median : 7.00
## Mean   :0.5      Mean   : 4.661      Mean   : 4.67      Mean   :10.34
## 3rd Qu.:1.0      3rd Qu.: 6.000      3rd Qu.: 5.00      3rd Qu.:11.00
## Max.   :1.0      Max.   :46.000      Max.   :46.00      Max.   :113.00
##
##      teamkills      teamdeaths      doublekills      triplekills      quadrakills
## Min.   : 0.00      Min.   : 0.00      Min.   :0.00      Min.   :0.000      Min.   :0.000
## 1st Qu.: 8.00      1st Qu.: 8.00      1st Qu.:0.00      1st Qu.:0.000      1st Qu.:0.000
## Median :14.00      Median :14.00      Median :0.00      Median :0.000      Median :0.000
## Mean   :13.98      Mean   :14.01      Mean   :0.54      Mean   :0.095      Mean   :0.015
## 3rd Qu.:19.00      3rd Qu.:19.00      3rd Qu.:1.00      3rd Qu.:0.000      3rd Qu.:0.000
## Max.   :46.00      Max.   :46.00      Max.   :9.00      Max.   :4.000      Max.   :2.000
##                                     NA's   :3768      NA's   :3768      NA's   :3768
##      pentakills      firstblood      firstbloodkill firstbloodassist
## Min.   :0.000      Min.   :0.0000      Min.   :0.0      Min.   :0.000
## 1st Qu.:0.000      1st Qu.:0.0000      1st Qu.:0.0      1st Qu.:0.000
## Median :0.000      Median :0.0000      Median :0.0      Median :0.000
## Mean   :0.003      Mean   :0.2897      Mean   :0.1      Mean   :0.142
## 3rd Qu.:0.000      3rd Qu.:1.0000      3rd Qu.:0.0      3rd Qu.:0.000
## Max.   :1.000      Max.   :1.0000      Max.   :1.0      Max.   :1.000
## NA's   :3768      NA's   :3140      NA's   :5088      NA's   :8228
##      firstbloodvictim      team.kpm      ckpm      firstdragon
## Min.   :0.0      Min.   :0.0000      Min.   :0.2022      Min.   :0.0
## 1st Qu.:0.0      1st Qu.:0.2607      1st Qu.:0.6962      1st Qu.:0.0
## Median :0.0      Median :0.4147      Median :0.8540      Median :0.5
## Mean   :0.1      Mean   :0.4428      Mean   :0.8856      Mean   :0.5
## 3rd Qu.:0.0      3rd Qu.:0.5949      3rd Qu.:1.0445      3rd Qu.:1.0
## Max.   :1.0      Max.   :1.6875      Max.   :2.1083      Max.   :1.0
## NA's   :8228                                     NA's   :26068
##      dragons      opp_dragons      elementaldrakes opp_elementaldrakes
## Min.   :0.000      Min.   :0.000      Min.   :0.000      Min.   :0.000
## 1st Qu.:1.000      1st Qu.:1.000      1st Qu.:1.000      1st Qu.:1.000
## Median :2.000      Median :2.000      Median :2.000      Median :2.000
## Mean   :2.296      Mean   :2.296      Mean   :2.242      Mean   :2.242

```

##	3rd Qu.:3.000	3rd Qu.:3.000	3rd Qu.:3.000	3rd Qu.:3.000
##	Max. :6.000	Max. :6.000	Max. :4.000	Max. :4.000
##	NA's :25440	NA's :25440	NA's :26070	NA's :26070
##	infernals	mountains	clouds	oceans
##	Min. :0.000	Min. :0.000	Min. :0.000	Min. :0.000
##	1st Qu.:0.000	1st Qu.:0.000	1st Qu.:0.000	1st Qu.:0.000
##	Median :0.000	Median :0.000	Median :0.000	Median :0.000
##	Mean :0.429	Mean :0.416	Mean :0.432	Mean :0.433
##	3rd Qu.:1.000	3rd Qu.:1.000	3rd Qu.:1.000	3rd Qu.:1.000
##	Max. :4.000	Max. :4.000	Max. :4.000	Max. :4.000
##	NA's :26068	NA's :26068	NA's :26068	NA's :26068
##	chemtechs	hextechs	dragons..type.unknown.	elders
##	Min. :0.000	Min. :0.000	Min. :0.000	Min. :0.000
##	1st Qu.:0.000	1st Qu.:0.000	1st Qu.:1.000	1st Qu.:0.000
##	Median :0.000	Median :0.000	Median :2.000	Median :0.000
##	Mean :0.118	Mean :0.414	Mean :2.244	Mean :0.065
##	3rd Qu.:0.000	3rd Qu.:1.000	3rd Qu.:3.000	3rd Qu.:0.000
##	Max. :4.000	Max. :4.000	Max. :5.000	Max. :2.000
##	NA's :26070	NA's :26070	NA's :29716	NA's :26068
##	opp_elders	firstherald	heralds	opp_heralds
##	Min. :0.000	Min. :0.0	Min. :0.000	Min. :0.000
##	1st Qu.:0.000	1st Qu.:0.0	1st Qu.:0.000	1st Qu.:0.000
##	Median :0.000	Median :0.0	Median :1.000	Median :1.000
##	Mean :0.065	Mean :0.5	Mean :0.984	Mean :0.984
##	3rd Qu.:0.000	3rd Qu.:1.0	3rd Qu.:2.000	3rd Qu.:2.000
##	Max. :2.000	Max. :1.0	Max. :2.000	Max. :2.000
##	NA's :26068	NA's :26068	NA's :26068	NA's :26068
##	firstbaron	barons	opp_barons	firsttower
##	Min. :0.000	Min. :0.000	Min. :0.000	Min. :0.0
##	1st Qu.:0.000	1st Qu.:0.000	1st Qu.:0.000	1st Qu.:0.0
##	Median :0.000	Median :0.000	Median :0.000	Median :0.5
##	Mean :0.474	Mean :0.239	Mean :0.239	Mean :0.5
##	3rd Qu.:1.000	3rd Qu.:0.000	3rd Qu.:0.000	3rd Qu.:1.0
##	Max. :1.000	Max. :4.000	Max. :4.000	Max. :1.0
##	NA's :26068	NA's :4070	NA's :4070	NA's :26068
##	towers	opp_towers	firstmidtower	firsttothreetowers
##	Min. : 0.000	Min. : 0.000	Min. :0.0	Min. :0.0
##	1st Qu.: 3.000	1st Qu.: 3.000	1st Qu.:0.0	1st Qu.:0.0
##	Median : 7.000	Median : 7.000	Median :0.5	Median :0.5
##	Mean : 6.144	Mean : 6.144	Mean :0.5	Mean :0.5
##	3rd Qu.: 9.000	3rd Qu.: 9.000	3rd Qu.:1.0	3rd Qu.:1.0
##	Max. :11.000	Max. :11.000	Max. :1.0	Max. :1.0
##	NA's :25440	NA's :25440	NA's :26068	NA's :26068
##	turretplates	opp_turretplates	inhibitors	opp_inhibitors
##	Min. : 0.000	Min. : 0.000	Min. :0.000	Min. :0.000
##	1st Qu.: 3.000	1st Qu.: 3.000	1st Qu.:0.000	1st Qu.:0.000
##	Median : 5.000	Median : 5.000	Median :0.000	Median :0.000
##	Mean : 4.865	Mean : 4.865	Mean :0.338	Mean :0.338
##	3rd Qu.: 7.000	3rd Qu.: 7.000	3rd Qu.:0.000	3rd Qu.:0.000
##	Max. :15.000	Max. :15.000	Max. :8.000	Max. :8.000
##	NA's :26070	NA's :26070	NA's :4060	NA's :4060
##	damagetochampions	dpm	damageshare	damagetakenperminute
##	Min. : 629	Min. : 18.09	Min. :0.014	Min. : 23.85
##	1st Qu.: 7438	1st Qu.: 243.97	1st Qu.:0.121	1st Qu.: 386.10

```

## Median : 13058      Median : 419.96      Median :0.198      Median : 573.07
## Mean   : 20904      Mean   : 646.45      Mean   :0.200      Mean   : 928.99
## 3rd Qu.: 22872      3rd Qu.: 686.33      3rd Qu.:0.269      3rd Qu.: 922.98
## Max.   :197845      Max.   :4100.26      Max.   :0.700      Max.   :4789.45
##                                     NA's   :5088
## damagemitigatedperminute  wardsplaced      wpm      wardskilled
## Min.   : 15.43      Min.   : 0.00      Min.   :0.0000      Min.   : 0.00
## 1st Qu.: 268.53      1st Qu.: 11.00      1st Qu.:0.3535      1st Qu.: 5.00
## Median : 499.01      Median : 15.00      Median :0.4737      Median : 9.00
## Mean   : 792.81      Mean   : 33.38      Mean   :1.0309      Mean   : 14.72
## 3rd Qu.: 872.33      3rd Qu.: 46.00      3rd Qu.:1.4651      3rd Qu.: 16.00
## Max.   :7240.09      Max.   :267.00      Max.   :6.3723      Max.   :125.00
## NA's   :3768
## wcpm      controlwardsbought  visionscore      vspm
## Min.   :0.0000      Min.   : 0.00      Min.   : 4.0      Min.   : 0.1614
## 1st Qu.:0.1748      1st Qu.: 5.00      1st Qu.: 31.0      1st Qu.: 1.0012
## Median :0.2867      Median : 8.00      Median : 45.0      Median : 1.3602
## Mean   :0.4508      Mean   : 13.55      Mean   : 77.2      Mean   : 2.3781
## 3rd Qu.:0.4749      3rd Qu.: 16.00      3rd Qu.: 82.0      3rd Qu.: 2.5349
## Max.   :3.0620      Max.   :110.00      Max.   :599.0      Max.   :11.4872
##
## totalgold      earnedgold      earned.gpm      earnedgoldshare
## Min.   : 3455      Min.   : 925      Min.   : 37.73      Min.   :0.049
## 1st Qu.: 9386      1st Qu.: 5431      1st Qu.: 181.29      1st Qu.:0.158
## Median : 12180      Median : 8000      Median : 253.71      Median :0.211
## Mean   : 19101      Mean   :12113      Mean   : 378.77      Mean   :0.200
## 3rd Qu.: 15912      3rd Qu.:11262      3rd Qu.: 337.63      3rd Qu.:0.250
## Max.   :109439      Max.   :71576      Max.   :1714.41      Max.   :0.421
##                                     NA's   :5088
## goldspent      gspd      total.cs      minionkills
## Min.   : 2850      Min.   : -0.533      Min.   : 1.0      Min.   : 1.0
## 1st Qu.: 8775      1st Qu.: -0.105      1st Qu.:146.8      1st Qu.: 38.0
## Median : 11275      Median : 0.000      Median :219.0      Median : 223.0
## Mean   : 17683      Mean   : 0.000      Mean   :203.4      Mean   : 261.8
## 3rd Qu.: 14784      3rd Qu.: 0.105      3rd Qu.:277.0      3rd Qu.: 294.0
## Max.   :101080      Max.   : 0.533      Max.   :605.0      Max.   :1646.0
##                                     NA's   :25440      NA's   :5088      NA's   :628
## monsterkills      monsterkillsownjungle  monsterkillsenemyjungle
## Min.   : 0.00      Min.   : 0.00      Min.   : 0.000
## 1st Qu.: 4.00      1st Qu.: 4.00      1st Qu.: 0.000
## Median : 23.00      Median : 19.00      Median : 1.000
## Mean   : 68.09      Mean   : 47.15      Mean   : 5.938
## 3rd Qu.:138.00      3rd Qu.: 92.00      3rd Qu.: 8.000
## Max.   :434.00      Max.   :250.00      Max.   :86.000
##                                     NA's   :26748      NA's   :26748
## cspm      goldat10      xpat10      csat10
## Min.   : 0.0259      Min.   : 1698      Min.   : 838      Min.   : 0.0
## 1st Qu.: 5.3574      1st Qu.: 2985      1st Qu.: 3091      1st Qu.: 61.0
## Median : 7.8996      Median : 3314      Median : 3940      Median : 78.0
## Mean   :10.2198      Mean   : 5224      Mean   : 6077      Mean   :106.2
## 3rd Qu.: 9.5768      3rd Qu.: 3769      3rd Qu.: 4831      3rd Qu.: 91.0
## Max.   :46.1296      Max.   :20743      Max.   :21344      Max.   :390.0
## NA's   :628      NA's   :3768      NA's   :3768      NA's   :3768
## opp_goldat10      opp_xpat10      opp_csat10      golddiffat10

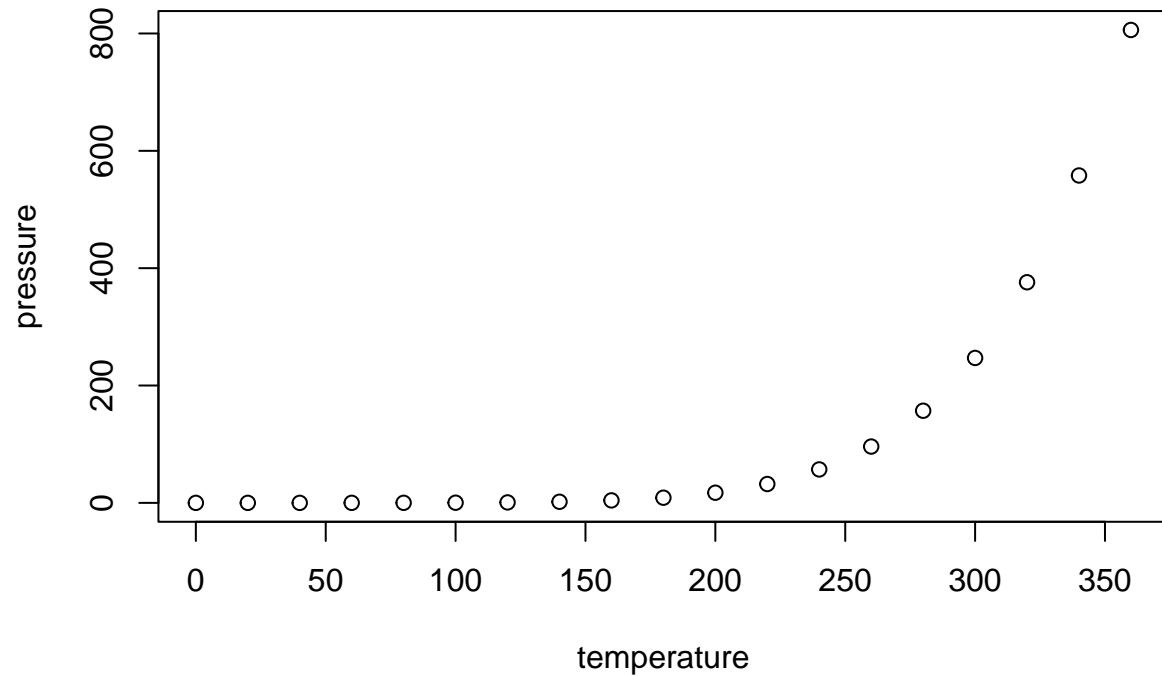
```

##	Min.	: 1698	Min.	: 838	Min.	: 0.0	Min.	:-7268
##	1st Qu.:	2985	1st Qu.:	3091	1st Qu.:	61.0	1st Qu.:	-343
##	Median :	3314	Median :	3940	Median :	78.0	Median :	0
##	Mean :	5224	Mean :	6077	Mean :	106.2	Mean :	0
##	3rd Qu.:	3769	3rd Qu.:	4831	3rd Qu.:	91.0	3rd Qu.:	343
##	Max.	:20743	Max.	:21344	Max.	:390.0	Max.	: 7268
##	NA's	:3768	NA's	:3768	NA's	:3768	NA's	:3768
##	xpdifffat10		csdifffat10		killsat10		assistsat10	
##	Min.	:-4502	Min.	:-110.00	Min.	: 0.000	Min.	: 0.000
##	1st Qu.:	-311	1st Qu.:	-8.25	1st Qu.:	0.000	1st Qu.:	0.000
##	Median :	0	Median :	0.00	Median :	0.000	Median :	0.000
##	Mean :	0	Mean :	0.00	Mean :	0.698	Mean :	1.078
##	3rd Qu.:	311	3rd Qu.:	8.25	3rd Qu.:	1.000	3rd Qu.:	1.000
##	Max.	: 4502	Max.	: 110.00	Max.	:15.000	Max.	:35.000
##	NA's	:3768	NA's	:3768	NA's	:3768	NA's	:3768
##	deathsat10		opp_killsat10		opp_assistsat10		opp_deathsat10	
##	Min.	: 0.0	Min.	: 0.000	Min.	: 0.000	Min.	: 0.0
##	1st Qu.:	0.0	1st Qu.:	0.000	1st Qu.:	0.000	1st Qu.:	0.0
##	Median :	0.0	Median :	0.000	Median :	0.000	Median :	0.0
##	Mean :	0.7	Mean :	0.698	Mean :	1.078	Mean :	0.7
##	3rd Qu.:	1.0	3rd Qu.:	1.000	3rd Qu.:	1.000	3rd Qu.:	1.0
##	Max.	:15.0	Max.	:15.000	Max.	:35.000	Max.	:15.0
##	NA's	:3768	NA's	:3768	NA's	:3768	NA's	:3768
##	goldat15		xpat15		csat15		opp_goldat15	
##	Min.	: 2433	Min.	: 1729	Min.	: 0.0	Min.	: 2433
##	1st Qu.:	4633	1st Qu.:	5166	1st Qu.:	93.0	1st Qu.:	4633
##	Median :	5251	Median :	6393	Median :	125.0	Median :	5251
##	Mean :	8261	Mean :	9797	Mean :	169.2	Mean :	8261
##	3rd Qu.:	6117	3rd Qu.:	7716	3rd Qu.:	146.0	3rd Qu.:	6117
##	Max.	:33969	Max.	:33982	Max.	:618.0	Max.	:33969
##	NA's	:3768	NA's	:3768	NA's	:3768	NA's	:3768
##	opp_xpat15		opp_csat15		golddifffat15		xpdifffat15	
##	Min.	: 1729	Min.	: 0.0	Min.	:-13670	Min.	:-10019
##	1st Qu.:	5166	1st Qu.:	93.0	1st Qu.:	-665	1st Qu.:	-528
##	Median :	6393	Median :	125.0	Median :	0	Median :	0
##	Mean :	9797	Mean :	169.2	Mean :	0	Mean :	0
##	3rd Qu.:	7716	3rd Qu.:	146.0	3rd Qu.:	665	3rd Qu.:	528
##	Max.	:33982	Max.	:618.0	Max.	: 13670	Max.	: 10019
##	NA's	:3768	NA's	:3768	NA's	:3768	NA's	:3768
##	csdifffat15		killsat15		assistsat15		deathsat15	
##	Min.	:-179	Min.	: 0.000	Min.	: 0.000	Min.	: 0.000
##	1st Qu.:	-13	1st Qu.:	0.000	1st Qu.:	0.000	1st Qu.:	0.000
##	Median :	0	Median :	1.000	Median :	1.000	Median :	1.000
##	Mean :	0	Mean :	1.296	Mean :	2.114	Mean :	1.299
##	3rd Qu.:	13	3rd Qu.:	2.000	3rd Qu.:	3.000	3rd Qu.:	2.000
##	Max.	: 179	Max.	:21.000	Max.	:47.000	Max.	:21.000
##	NA's	:3768	NA's	:3768	NA's	:3768	NA's	:3768
##	opp_killsat15		opp_assistsat15		opp_deathsat15			
##	Min.	: 0.000	Min.	: 0.000	Min.	: 0.000		
##	1st Qu.:	0.000	1st Qu.:	0.000	1st Qu.:	0.000		
##	Median :	1.000	Median :	1.000	Median :	1.000		
##	Mean :	1.296	Mean :	2.114	Mean :	1.299		
##	3rd Qu.:	2.000	3rd Qu.:	3.000	3rd Qu.:	2.000		
##	Max.	:21.000	Max.	:47.000	Max.	:21.000		

```
## NA's :3768 NA's :3768 NA's :3768
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.