

# getfame

**-n** names

**-s** series

**-e** expression

getfame Json api 2024 / 2025

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2025 Supports series w identical series names in different FAME databases, formulas can aggregate from several open databases

# 1. getfame -n = getfamenames gets FAME metadata

```
rsb@sl-fame-p1:ssb/bruker/refertid/system/myfame/api
```

```
sl-fame-p1:ssb/bruker/refertid/system/myfame/api> getfame -n "$REFERTID/data/kpi_publ, $REFERTID/data/kpi_erik.db" "Total?,K01111_?" [{"GetFAME_Json_Api": "Erik.Soberg@ssb.no", "Version": "Oslo-20250602", "Executed": "2025-06-03T10:42:35", "Famever": "2022.43", "Database": "/ssb/bruker/refertid/data/kpi_publ, /ssb/bruker/refertid/data/kpi_erik.db", "Open": "KPI_PUBL, KPI_ERIK", "Result": "$HOME/.GetFAME/getfamenames.json", "Wildcard": "TOTAL?,K01111_?", "Found": 22, "Notfound": 0, "Missing": "", "Series": [{"Name": "KPI_ERIK'K01111_11111.IPR", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Ris_indeks pris", "Created": "2017-01-18T18:28:28", "Updated": "2025-02-10T09:25:49"}, {"Name": "KPI_ERIK'K01111_11111.IPR.A", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Ris_indeks pris_Ersgjsn", "Created": "2017-01-18T18:28:28", "Updated": "2025-01-10T08:33:25"}, {"Name": "KPI_ERIK'TOTAL.IPR", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_indeks pris", "Created": "2017-01-18T18:28:29", "Updated": "2025-02-10T09:25:48"}, {"Name": "KPI_ERIK'TOTAL.IPR.A", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_indeks pris_Ersgjsn", "Created": "2017-01-18T18:28:29", "Updated": "2025-01-10T08:33:25"}, {"Name": "KPI_ERIK'TOTAL.IPR.G", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_Trend(prog1)", "Created": "2025-02-10T09:25:49", "Updated": "2025-02-10T09:25:50"}, {"Name": "KPI_ERIK'TOTAL.IPR.S", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_Sesongjustert(prog1)", "Created": "2025-02-10T09:25:49", "Updated": "2025-02-10T09:25:50"}, {"Name": "KPI_ERIK'TOTAL.PCT", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_1_mEneds prisendring", "Created": "2017-01-18T18:28:29", "Updated": "2017-01-18T18:57:02"}, {"Name": "KPI_ERIK'TOTAL.VK", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_vekt", "Created": "2017-01-18T18:28:29", "Updated": "2025-02-10T09:25:53"}, {"Name": "KPI_ERIK'TOTAL.YTYPCT", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_12_mEneders prisendring", "Created": "2017-01-18T18:28:29", "Updated": "2017-01-18T18:57:02"}, {"Name": "KPI_ERIK'TOTAL_JAE.IPR.G", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_Trend(prog1)", "Created": "2025-02-10T09:25:49", "Updated": "2025-02-10T09:25:50"}, {"Name": "KPI_ERIK'TOTAL_JAE.IPR.S", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_Sesongjustert(prog1)", "Created": "2025-02-10T09:25:49", "Updated": "2025-02-10T09:25:50"}, {"Name": "KPI_PUBL'K01111_11111.IPR", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Ris_indeks pris", "Created": "2017-01-18T18:28:28", "Updated": "2025-05-09T08:23:40"}, {"Name": "KPI_PUBL'K01111_11111.IPR.A", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Ris_indeks pris_Ersgjsn", "Created": "2017-01-18T18:28:28", "Updated": "2025-01-10T08:33:25"}, {"Name": "KPI_PUBL'TOTAL.IPR", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_indeks pris", "Created": "2017-01-18T18:28:29", "Updated": "2025-05-09T08:23:39"}, {"Name": "KPI_PUBL'TOTAL.IPR.A", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_indeks pris_Ersgjsn", "Created": "2017-01-18T18:28:29", "Updated": "2025-01-10T08:33:25"}, {"Name": "KPI_PUBL'TOTAL.IPR.G", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_Trend(prog1)", "Created": "2025-05-09T08:23:40", "Updated": "2025-05-09T08:23:42"}, {"Name": "KPI_PUBL'TOTAL.IPR.S", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_Sesongjustert(prog1)", "Created": "2025-05-09T08:23:40", "Updated": "2025-05-09T08:23:42"}, {"Name": "KPI_PUBL'TOTAL.PCT", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_1_mEneds prisendring", "Created": "2017-01-18T18:28:29", "Updated": "2017-01-18T18:57:02"}, {"Name": "KPI_PUBL'TOTAL.VK", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_vekt", "Created": "2017-01-18T18:28:29", "Updated": "2025-05-09T08:23:45"}, {"Name": "KPI_PUBL'TOTAL.YTYPCT", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_12_mEneders prisendring", "Created": "2017-01-18T18:28:29", "Updated": "2017-01-18T18:57:02"}, {"Name": "KPI_PUBL'TOTAL_JAE.IPR.G", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_Trend(prog1)", "Created": "2025-05-09T08:23:40", "Updated": "2025-05-09T08:23:42"}, {"Name": "KPI_PUBL'TOTAL_JAE.IPR.S", "Class": "SERIES", "Observed": "AVERAGED", "Desc": "Totalindeks_Sesongjustert(prog1)", "Created": "2025-05-09T08:23:40", "Updated": "2025-05-09T08:23:42"}], "Elapsed_time_in_seconds": 0.058 } ]
```

# getfame -n with identical databases identical seriesnames different places)

X sl-fame-1

```
sl-fame-1:"/MyFame2023/pro/api> $REFERTID/system/myfame/api/getfame -n "testapi, $PWD/../../testapi.db" "e?,TEST?"  
[{"GetFAME_Json_Api": "Erik.Soberg@ssb.no",  
"Version": "Oslo-20250605",  
"Executed": "2025-06-04T14:14:00",  
"Famever": "11.53",  
"Database": "testapi, /ssb/bruker/rsb/MyFame2023/pro/api/../../testapi.db",  
"Openas": "TESTAPI, TESTAPI2",  
"Result": "$HOME/.GetFAME/getfamenames.json",  
"Wildcard": "E?,TEST?",  
"Found": 9,  
"Notfound": 0,  
"Missing": "",  
"Series": [  
 {"Name": "TESTAPI'ERIK", "Class": "SERIES", "Observed": "SUMMED", "Freq": "MONTHLY", "Desc": "dEScription of erik", "Created": "2024-09-09T22:21:26", "Updated": "2025-06-02T12:48:59"},  
 {"Name": "TESTAPI'TEST.ANN", "Class": "SERIES", "Observed": "SUMMED", "Freq": "ANNUAL", "Desc": "", "Created": "2024-06-16T21:53:09", "Updated": "2024-06-17T15:44:56"},  
 {"Name": "TESTAPI'TEST.MON", "Class": "SERIES", "Observed": "SUMMED", "Freq": "MONTHLY", "Desc": "mytest", "Created": "2024-06-16T21:54:14", "Updated": "2025-06-01T22:39:56"},  
 {"Name": "TESTAPI'TEST.MON.F", "Class": "FORMULA", "Observed": "TEST.MON *10", "Freq": "NC", "Desc": "", "Created": "2024-06-16T21:55:16", "Updated": "2024-06-16T21:55:53"},  
 {"Name": "TESTAPI2'ERIK", "Class": "SERIES", "Observed": "SUMMED", "Freq": "MONTHLY", "Desc": "script of erik soeb WOW", "Created": "2024-09-09T22:21:26", "Updated": "2025-06-01T15:55:47"},  
 {"Name": "TESTAPI2'EXTRA", "Class": "SERIES", "Observed": "SUMMED", "Freq": "ANNUAL", "Desc": "extraextras", "Created": "2025-05-30T13:12:53", "Updated": "2025-06-01T15:55:47"},  
 {"Name": "TESTAPI2'TEST.ANN", "Class": "SERIES", "Observed": "SUMMED", "Freq": "ANNUAL", "Desc": "", "Created": "2024-06-16T21:53:09", "Updated": "2025-05-30T11:44:37"},  
 {"Name": "TESTAPI2'TEST.MON", "Class": "SERIES", "Observed": "SUMMED", "Freq": "MONTHLY", "Desc": "", "Created": "2024-06-16T21:54:14", "Updated": "2024-06-16T22:42:05"},  
 {"Name": "TESTAPI2'TEST.MON.F", "Class": "FORMULA", "Observed": "TEST.MON *10", "Freq": "NC", "Desc": "", "Created": "2024-06-16T21:55:16", "Updated": "2024-06-16T21:55:53"}],  
 "Elapsed_time_in_seconds": 0.004  
}]
```



# **getfame -n \$REFERTID/system/myfame/api/getfamenames**

**Combine with linux commands to find descriptions, or series with incorrect definitions**

**The command below lists all series in the database but only show the one with the text «SUMM»**

rsb@sl-fame-p1:/ssb/bruker/refertid/system/myfame/api

```
sl-fame-p1:/ssb/bruker/refertid/system/myfame/api> getfame -n "$REFERTID/data/kpi_publ" "?" | grep SUMM
{"Name":"KPI_PUBL'JAE_TOTAL.IPR.S","Class":"SERIES","Observed":"SUMMED","Desc":"","Created":"2017-02-10T08:27:54","Updated":"2017-02-10T09:05:17"},
```

## 2. getfame -s \$REFERTID/system/myfame/api/getfameseries

```
rsb@sl-fame-p1:ssb/bruker/refertid/system/myfame/api
sl-fame-p1:ssb/bruker/refertid/system/myfame/api> getfame -s "$REFERTID/data/kpi_publ, $HOME/kpi.db" "K02.ipr,K01.IPR" "freq m;date feb24 to mar24;deci 1"
[{"GetFAME_Json_Api": "Erik.Soberg@ssb.no",
"Version": "Oslo-20250602",
"Executed": "2025-06-03T11:02:28",
"Famever": "2022.43",
"Database": "/ssb/bruker/refertid/data/kpi_publ, /ssb/bruker/rsb/kpi.db",
"Open": "KPI_PUBL, KPI",
"Result": "$HOME/.GetFAME/getfameseries.json",
"Wildcard": "K02.IPR,K01.IPR",
"Found": 4,
"Notfound": 0,
"Missing": "",
"Series": [
{"Name": "KPI_PUBL'K02.IPR",
"Desc": "Alkoholholdige drikkevarer og tobakk_indeks pris",
"Daterange": "FEB24 TO MAR24",
"Frequency": "MONTHLY",
"Observations": [
{"Date": "2024-02-01", "Value": 126.5, "Epo": [1706745600000, 126.5]},
 {"Date": "2024-03-01", "Value": 126.4, "Epo": [1709251200000, 126.4]}
 ] },
 {"Name": "KPI_PUBL'K01.IPR",
"Desc": "Matvarer og alkoholfrie drikkevarer_indeks pris",
"Daterange": "FEB24 TO MAR24",
"Frequency": "MONTHLY",
"Observations": [
 {"Date": "2024-02-01", "Value": 128.2, "Epo": [1706745600000, 128.2]},
 {"Date": "2024-03-01", "Value": 125.8, "Epo": [1709251200000, 125.8]}
 ] },
 {"Name": "KPI'K02.IPR",
"Desc": "Alkoholholdige drikkevarer og tobakk_indeks pris",
"Daterange": "FEB24 TO MAR24",
"Frequency": "MONTHLY",
"Observations": [
 {"Date": "2024-02-01", "Value": 126.5, "Epo": [1706745600000, 126.5]},
 {"Date": "2024-03-01", "Value": 126.4, "Epo": [1709251200000, 126.4]}
 ] },
 {"Name": "KPI'K01.IPR",
"Desc": "Matvarer og alkoholfrie drikkevarer_indeks pris",
"Daterange": "FEB24 TO MAR24",
"Frequency": "MONTHLY",
"Observations": [
 {"Date": "2024-02-01", "Value": 128.2, "Epo": [1706745600000, 128.2]},
 {"Date": "2024-03-01", "Value": 125.8, "Epo": [1709251200000, 125.8]}
 ] }
],
"Elapsed_time_in_seconds": 0.005
} ]
```

# getfame -S      getfameseries samples

```
$REFERTID/system/myfame/api/getfameseries /ssb/bruker/refertid/data/kpi_publ.db "total.ipr"
```

```
getfameseries /ssb/bruker/refertid/data/kpi_publ.db "total.ipr, K0?IPR " "date 2024 "
```

```
getfameseries /ssb/bruker/refertid/data/kpi_publ.db "total.ipr" "freq m; date thisday(m)-5 to *"
```

```
getfameseries $REFERTID/data/fornavn.db "?ERIK,KRISTIN,JIM?" "date 2010 to 2012 "
```

```
getfameseries " /ssb/bruker/refertid/data/fornavn.db" "?JAN?" "date 2000 to 2005 "
```

```
getfameseries " /ssb/bruker/refertid/data/fornavn.db" "JI?" "date 2000 to *; deci 1 "
```

```
getfameseries "fornavn.db, name.db" "JI? ,MATT?" "date 2000 to * ; deci 2 "
```

```
getfameseries "pi1.db, cpi2.db,cpi_form.db" "Total.ipr" "date 2025 ; deci 2"
```

# getfame -s

From  
jupyter  
with  
py:

Eriks.py (4) - JupyterLab    x    +

rsb/lab/tree/Py/Eriks.py

Git   Tabs   Settings   Help    Mem: 703 / 20480

getfameser X   getfameex X   Eriks.py   getfamenai X   +

getfameser X   getfamenai X   getfamee X   Eriks.py   +

```
import subprocess, json, pandas as pd
import matplotlib.ticker as ticker
from datetime import datetime
import matplotlib.pyplot as plt
import matplotlib.dates as mdates

#famebase = '$HOME/erik.db'
famebase = '$REFERTID/data/fornavn.db'
famesoek = 'ERIK?,JANN?'
#famedato = 'date 2000 to *'
famedato = 'date thisday(a)-20 to *'

# Hente Fame
command = f'ssh sl-fame-1.ssb.no \
\$REFERTID/system/myfame/api/getfameseries {famebase} \
{famesoek}' "{famedato}"\\'

pic.xlabel('Time')
plt.ylabel('Values')
# May want to use Desc instead of Series name.
# Use the first 2
plt.title(f'{data[0]["Series"][0]["Name"]}') and
plt.title(f'DemoChart: {famesoek} in {famedato}')
plt.grid(True)
plt.legend()

# Display the plot
plt.show()
```

DemoChart: ERIK?,JANN? in date thisday(a)-20 to \*

Year	ERIK	ERIKA	JANNE	JANNICKE	JANNIKE
2004	0.68	0.12	0.02	0.02	0.01
2005	0.70	0.12	0.05	0.02	0.01
2006	0.68	0.11	0.06	0.02	0.01
2007	0.69	0.14	0.07	0.02	0.01
2008	0.65	0.15	0.06	0.02	0.01
2009	0.64	0.12	0.07	0.02	0.01
2010	0.63	0.13	0.06	0.02	0.01
2011	0.62	0.14	0.05	0.02	0.01
2012	0.61	0.14	0.05	0.02	0.01

### 3. getfame -e

\$REFERTID/system/myfame/api/getfameexpr

advanced mode

- Data-observations, from FAME database(s) given a fame-**expression**:

```
getfame -e "$REFERTID/data/fornavn.db " "mave(ERIK,2)" "date 2000 to 2010"
```

```
getfame -e "$REFERTID/data/fornavn.db " "Lsum(ERIK,EIRIK)" "date 2000 to *"
```

```
getfame -e "$REFERTID/data/fornavn.db " "ERIK+EIRIK" "date 2000 to *"
```

```
getfame -e "$REFERTID/data/kpi_publ.db, mycpi.db " "convert(total.ipr,annual,constant)" "date *; deci 1"
```

```
getfame -e "$REFERTID/data/kpi_publ.db, mycpi.db " "PCT(mycpi'K09.IPR)" "date 2025; deci 1"
```

```
getfame -e "cpi1.db,cpi2.db,cpi_form.db" "cpi1'Total.ipr" "date 2025 ; deci 2"
```

Be aware to **double quote arguments** when they contain special char like : , ( ‘ ;

# getfame -e gets a fame-expression

sl-fame-1

```
sl-fame-1:/ssb/bruker/refertid/system/myfame/api> getfame -e "/ssb/bruker/refertid/data/kpi_publ.db" "pct(total.ipr)" "date 2024 to *; deci 1"
[{"GetFAME_Json_Api": "Erik.Soberg@ssb.no",
"Version": "Oslo-20250605",
"Executed": "2025-06-04T16:02:57",
"Famever": "11.53",
"Database": "/ssb/bruker/refertid/data/kpi_publ.db",
"Openas": "KPI_PUBL",
"Result": "$HOME/.GetFAME/getfameexpr.json",
"Series": [
{"Name": "PCT(TOTAL,IPR)",
"Desc": "pct(total.ipr)",
"Daterange": "2024 TO *",
"Frequency": "MONTHLY",
"Observations": [
{"Date": "2024-01-01", "Value": 0.1, "Epo": [1704067200000, 0.1]},
 {"Date": "2024-02-01", "Value": 0.2, "Epo": [1706745600000, 0.2]},
 {"Date": "2024-03-01", "Value": 0.2, "Epo": [1709251200000, 0.2]},
 {"Date": "2024-04-01", "Value": 0.8, "Epo": [1711929600000, 0.8]},
 {"Date": "2024-05-01", "Value": -0.1, "Epo": [1714521600000, -0.1]},
 {"Date": "2024-06-01", "Value": 0.2, "Epo": [1717200000000, 0.2]},
 {"Date": "2024-07-01", "Value": 0.5, "Epo": [1719792000000, 0.5]},
 {"Date": "2024-08-01", "Value": -0.9, "Epo": [1722470400000, -0.9]},
 {"Date": "2024-09-01", "Value": 0.3, "Epo": [1725148800000, 0.3]},
 {"Date": "2024-10-01", "Value": 0.6, "Epo": [1727740800000, 0.6]},
 {"Date": "2024-11-01", "Value": 0.3, "Epo": [1730419200000, 0.3]},
 {"Date": "2024-12-01", "Value": -0.1, "Epo": [1733011200000, -0.1]},
 {"Date": "2025-01-01", "Value": 0.2, "Epo": [1735689600000, 0.2]},
 {"Date": "2025-02-01", "Value": 1.4, "Epo": [1738368000000, 1.4]},
 {"Date": "2025-03-01", "Value": -0.7, "Epo": [1740787200000, -0.7]},
 {"Date": "2025-04-01", "Value": 0.7, "Epo": [1743465600000, 0.7]}
 ]}], "Elapsed_time_in_seconds": 0.002
}]}
```

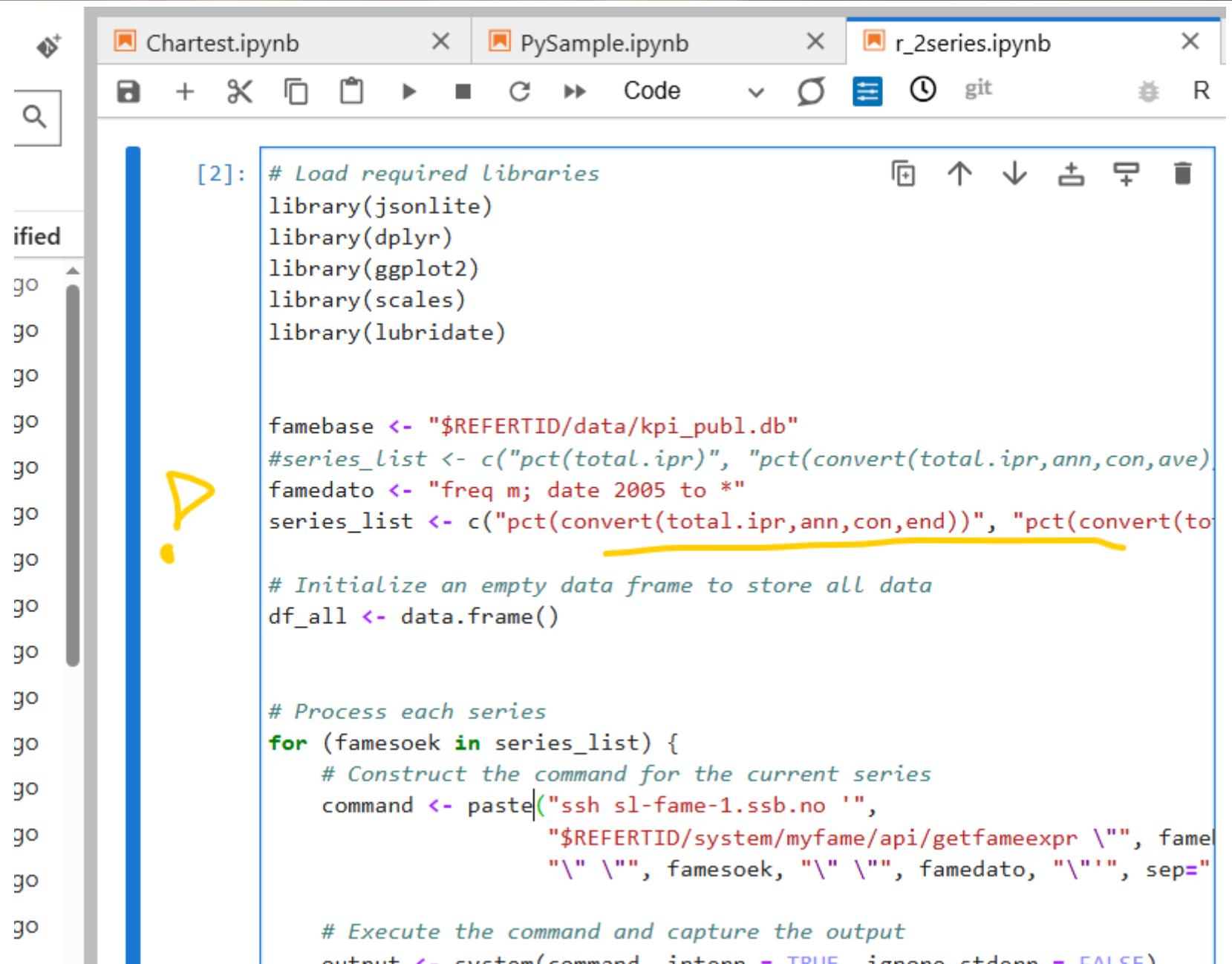
# getfame -e with several databases in case u have formulas elsewhere

```
X rsb@sl-fame-p1:ssb/bruker/refertid/system/myfame/api
xterm:> getfame -e "$REFERTID/data/kpi_publ.db, cpi.db" "mave(cpi'total.ipr,12)" "date 2024 to *;deci 1"
[{"GetFAME_Json_Api": "Erik.Soberg@ssb.no",
"Version": "Oslo-20250602",
"Executed": "2025-06-03T10:14:24",
"Famever": "11.53",
"Database": "/ssb/bruker/refertid/data/kpi_publ.db, cpi.db",
"Open": "KPI_PUBL, CPI",
"Result": "$HOME/.GetFAME/getfameexpr.json",
"Series": [
{"Name": "MAVE(TOTAL.IPR,12)",
"Desc": "mave(total.ipr,12)",
"Daterange": "2024 TO *",
"Frequency": "MONTHLY",
"Observations": [
{"Date": "2024-01-01", "Value": 130.1, "Epo": [1704067200000, 130.1]}, {"Date": "2024-02-01", "Value": 130.5, "Epo": [1706745600000, 130.5]}, {"Date": "2024-03-01", "Value": 130.9, "Epo": [1709251200000, 130.9]}, {"Date": "2024-04-01", "Value": 131.3, "Epo": [1711929600000, 131.3]}, {"Date": "2024-05-01", "Value": 131.7, "Epo": [1714521600000, 131.7]}, {"Date": "2024-06-01", "Value": 131.9, "Epo": [1717200000000, 131.9]}, {"Date": "2024-07-01", "Value": 132.2, "Epo": [1719792000000, 132.2]}, {"Date": "2024-08-01", "Value": 132.5, "Epo": [1722470400000, 132.5]}, {"Date": "2024-09-01", "Value": 132.9, "Epo": [1725148800000, 132.9]}, {"Date": "2024-10-01", "Value": 133.1, "Epo": [1727740800000, 133.1]}, {"Date": "2024-11-01", "Value": 133.4, "Epo": [1730419200000, 133.4]}, {"Date": "2024-12-01", "Value": 133.6, "Epo": [1733011200000, 133.6]}, {"Date": "2025-01-01", "Value": 133.9, "Epo": [1735689600000, 133.9]}, {"Date": "2025-02-01", "Value": 134.3, "Epo": [1738368000000, 134.3]}, {"Date": "2025-03-01", "Value": 134.6, "Epo": [1740787200000, 134.6]}, {"Date": "2025-04-01", "Value": 134.9, "Epo": [1743465600000, 134.9]}], "Elapsed_time_in_seconds": 0.004
} ]}
```

# Using the power of FAME by

**getfame -e**

with R  
from  
Jupyterlab



The screenshot shows a JupyterLab interface with three tabs at the top: 'Chartest.ipynb', 'PySample.ipynb', and 'r\_2series.ipynb'. The 'r\_2series.ipynb' tab is active. In the center, there is a code cell with the following content:

```
[2]: # Load required Libraries
library(jsonlite)
library(dplyr)
library(ggplot2)
library(scales)
library(lubridate)

famebase <- "$REFERTID/data/kpi_publ.db"
#series_list <- c("pct(total.ipr)", "pct(convert(total.ipr,ann,con,ave))
famedato <- "freq m; date 2005 to *"
series_list <- c("pct(convert(total.ipr,ann,con,end))", "pct(convert(to

# Initialize an empty data frame to store all data
df_all <- data.frame()

# Process each series
for (famesoek in series_list) {
  # Construct the command for the current series
  command <- paste("ssh sl-fame-1.ssb.no ''",
                   "$REFERTID/system/myfame/api/getfameexpr \"\"", fame
                   "\" \"\"", famesoek, "\" \"\"", famedato, "\"\"", sep="

  # Execute the command and capture the output
  output <- system(command, intern = TRUE, ignore.stdout = FALSE)
```

A yellow exclamation mark icon is positioned next to the first line of the code cell.

# getfame -e with R from Jupiterlab

```
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options(repr.plot.width = 16, repr.plot.height = 6) # Adjust the width and height as needed

ggplot(df_all, aes(x = Date, y = Value, color = Series)) +
  geom_line() +
  scale_x_datetime(labels = date_format("%b%y"), date_breaks = "1 year") +
  labs(title = paste("ChaRt: ", "CPI % Changes"),
       x = "month/year", y = "% Changes of CPI") +
  theme_minimal() +
  theme(axis.text.x = element_text(angle = 45, hjust = 1)) +
  guides(color = guide_legend(title = ""))
  scale_y_continuous(labels = scales::comma)

} else {
  cat("\nNo data to plot.\n")
}

ChaRt: CPI % Changes



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```

# Samples ( shows help info, when no arguments passed)

**getfamenames** (gets series names & metadata from databases with a list of wildcards)  
**getfame -n**

**getfameseries** (gets observations from  $\geq 1$  series in database(s) given a list of wildcards)  
**getfame -s**

**getfameexpr** (gets observations given 1 FAME expression)  
**getfame -e**

For complete **jupyterlab** samples, see Github

# Summary

- The **getfame -e** option use the full power of FAME and can evaluate formulas, functions, conversions among various series, formulas,frequencies and databases
- To get more series with **getfame -e** simply loop by expression and add to same charts or dataset.
- **getfame -n** is powerful when combining **grep | more |head** to search for series/formulas names or metadata