

Getfame

-n names
-d series
-e expression

FAME Json api 2024 / 2025

Erik.Soberg@ssb.no

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

From Xterm (getfame -e start here to understand)

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

```
xterm:> getfame -e "$REFERTID/data/kpi_publ.db" "pct(total.ipr" "date 2024 to *;deci 2"
```

```
[{"GetFAME_Api": "Erik.Soberg@ssb.no",  
  "Version": "Oslo-20250602",  
  "Executed": "2025-06-03T10:31:21",  
  "Famever": "11.53",  
  "Database": "/ssb/bruker/refertid/data/kpi_publ.db",  
  "Open": "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": 0.08, "Epo": [1704067200000, 0.08]},  
        {"Date": "2024-02-01", "Value": 0.23, "Epo": [1706745600000, 0.23]},  
        {"Date": "2024-03-01", "Value": 0.23, "Epo": [1709251200000, 0.23]},  
        {"Date": "2024-04-01", "Value": 0.83, "Epo": [1711929600000, 0.83]},  
        {"Date": "2024-05-01", "Value": -0.15, "Epo": [1714521600000, -0.15]},  
        {"Date": "2024-06-01", "Value": 0.22, "Epo": [1717200000000, 0.22]},  
        {"Date": "2024-07-01", "Value": 0.52, "Epo": [1719792000000, 0.52]},  
        {"Date": "2024-08-01", "Value": -0.89, "Epo": [1722470400000, -0.89]},  
        {"Date": "2024-09-01", "Value": 0.30, "Epo": [1725148800000, 0.30]},  
        {"Date": "2024-10-01", "Value": 0.60, "Epo": [1727740800000, 0.60]},  
        {"Date": "2024-11-01", "Value": 0.30, "Epo": [1730419200000, 0.30]},  
        {"Date": "2024-12-01", "Value": -0.07, "Epo": [1733011200000, -0.07]},  
        {"Date": "2025-01-01", "Value": 0.22, "Epo": [1735689600000, 0.22]},  
        {"Date": "2025-02-01", "Value": 1.41, "Epo": [1738368000000, 1.41]},  
        {"Date": "2025-03-01", "Value": -0.66, "Epo": [1740787200000, -0.66]},  
        {"Date": "2025-04-01", "Value": 0.66, "Epo": [1743465600000, 0.66]}  
      ]  
    }  
  ],  
  "Elapsed_time_in_seconds": 0.002  
}]
```

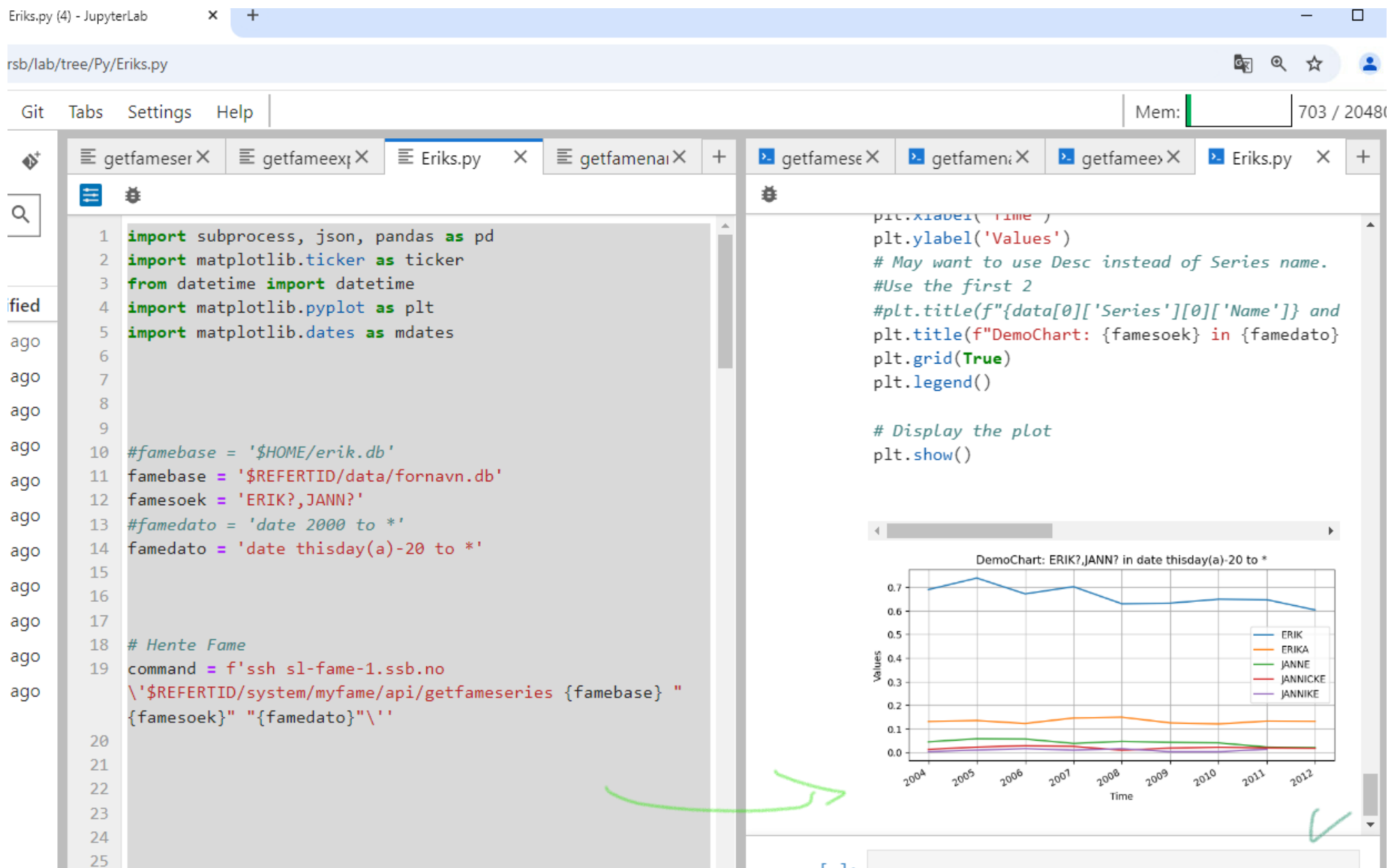
sl-fame-p1:/ssb/bruker/refertid/system/myfame/api>

From Xterm (getfame -e with several databases)

```
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
} ]
```

Getfame From jupyter using py:



1. getfame -n \$REFERTID/system/myfame/api/getfamenames

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, $REFERTID/data/kpi_erik.db" "Total?,K01111_?"
[{"GetFAME_Api": "Erik.Sobeng@ssb.no",
  "Version": "Oslo-20250602",
  "Executed": "2025-06-03T10:42:35",
  "Famever": "2022.43",
  "Database": "/ssb/bruker/refertid/data/kpi_publ, /ssb/bruker/refertid/data/kpi_erik.db",
  "Open": "KPI_PUBL, KPI_ERIK",
  "Result": "$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
}
```

1. 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, $HOME/kpi.db" "K02.ipr,K01.IPR" "freq m;date feb24 to mar24;deci 1"
[{"GetFAME_Api": "Erik.Soberg@ssb.no",
"Version": "Oslo-20250602",
"Executed": "2025-06-03T11:02:28",
"Famever": "2022.43",
"Database": "/ssb/bruker/refertid/data/kpi_publ, /ssb/bruker/rsb/kpi.db",
"Open": "KPI_PUBL, KPI",
"Result": "$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
}
]
```

More samples getfameseries ==getfame -n

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

```
getfameseries /ssb/bruker/refertid/data/kpi_publ.db "total.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 «cpi1.db,cpi2.db,cpi_form.db" «Total.ipr" "date 2025 ; deci 2"
```


3. getfameexpr `$REFERTID/system/myfame/api/getfameexpr`

advanced mode

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

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

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

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

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

Produces same json output format as getfameseries

More samples: getfame –e == getfameexpr

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

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

```
getfameexpr $REFERTID/data/kpi_publ.db "convert(total.ipr,annual,constant) " "date 2020 to * "
```

```
getfameexpr $REFERTID/data/kpi_publ.db "total.ipr" "freq m; date jan20 to feb20;deci 0 "
```

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

```
getfameexpr $REFERTID/data/fornavn.db "ERIK+EIRIK" "date 2000 to 2010;deci 1 "
```

*use of custom common **cb** basis function to set base-year to 2010 (instead of current 2015:*

```
getfameexpr getfameexpr /ssb/bruker/refertid/data/kpi_publ.db "cb(total.ipr,2010)" "date 2010 to 2020"
```

Samples (shows help info, when no arguments passed)

1. \$REFERTID/system/myfame/api/getfamenames
2. \$REFERTID/system/myfame/api/getfameseries
3. \$REFERTID/system/myfame/api/getfameexpr

For complete **jupyterlab** samples, see Github

Using R from Jupyterlab

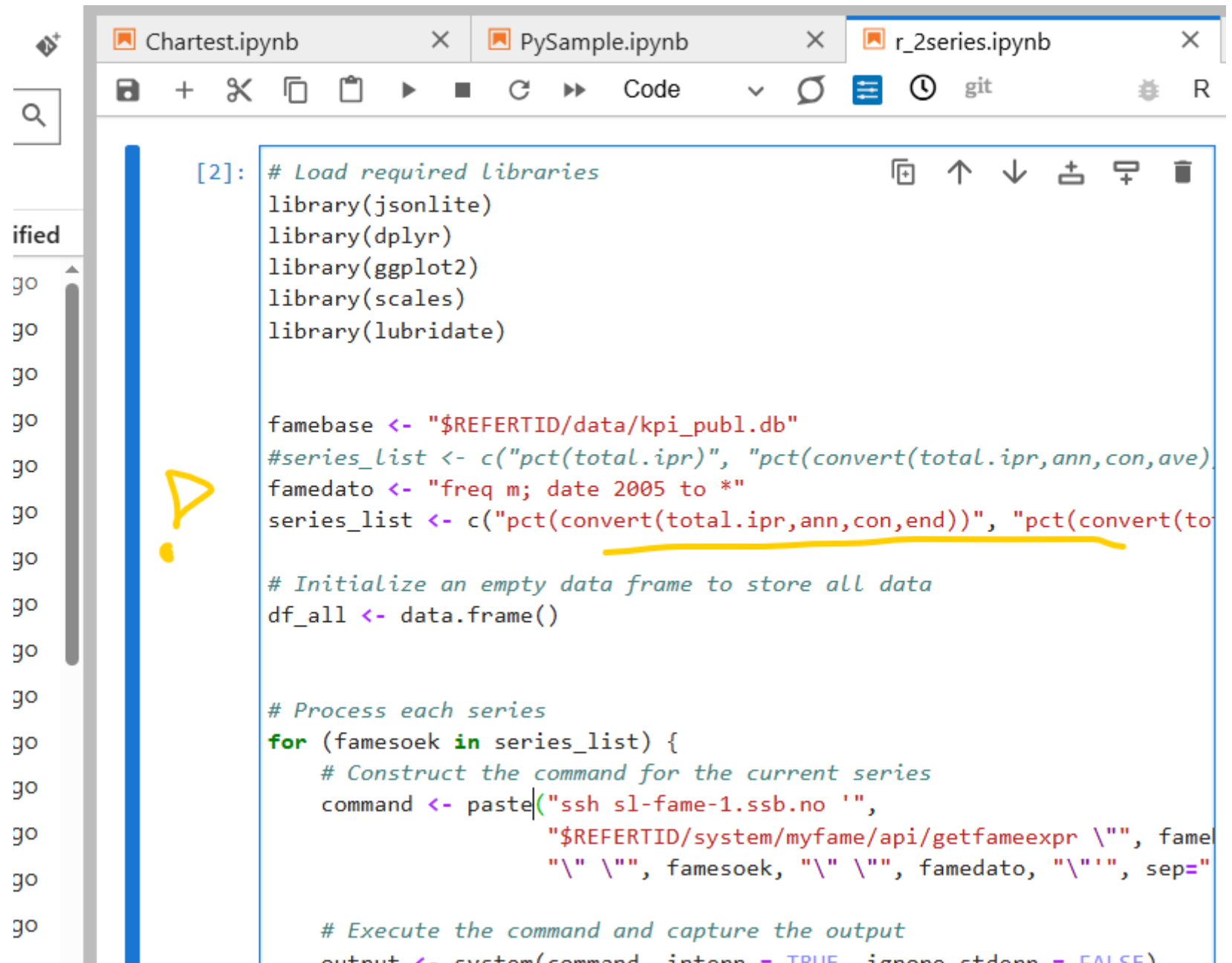
```
options(repr.plot.width = 16, repr.plot.height = 6) # Adjust the width and height as needed

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")
}
```



Using the
power of
FAME
getfame -e
by R
from
Jupyterlab



```
[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 '", famesoek,
                    "\" '", famesoek, "\" '", famedato, "\"'", sep="

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

Summary

- The **getfame -e** option use the full power of Fame and cane evaluate formulas, functions, conversions among varios frequiencies
- To get more series 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