

astro

March 25, 2020

```
[3]: #####
# DASHA CALCULATION BY Dr. Manichandra Sanoujam
# File name - astro.ipynb
# Utility version - 0.1
# Require func.ipynb
#####

import math as m
import swisseph as swe
from datetime import datetime
import import_ipynb
import func as f
from termcolor import colored
from dateutil.relativedelta import relativedelta
from IPython.display import display, Markdown, Latex

#####
# Astottari Dasha Calculation based on Kritikadi System
#####
def printAstottariDasha():
    dRes = f.astottariDasha(lunarLongitude[0][0])
    mahaETD = (dRes[1] * 360)
    mahaET = dCurrent + relativedelta(days=+mahaETD)
    ymdd = f.yMDD(dRes[0])
    print(colored("\nAstottari Dasha Calculation based on Kritikadi\
↪System", 'blue'))
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:\
↪{4:5.2f}".format(\
                                dRes[2],\
↪ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    ymdd = f.yMDD(dRes[1])
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:\
↪{4:5.2f}".format(\
                                dRes[2],\
↪ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    print("          Dasha ({0}) ending time: {1}.".format(dRes[2], mahaET))
```

```

#####
# Vimshottari Dasha Calculation
#####
def printVimshottariDasha():
    dRes = f.vimshottariDasha(lunarLongitude[0][0])
    vimBhukta, vimBhogya, vimGraha = dRes
    mahaETD = (dRes[1] * 360)
    mahaET = dCurrent + relativedelta(days=+mahaETD)
    ymdd = f.yMDD(dRes[0])
    print(colored("\nVimshottari Dasha", 'blue'))
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:␣
→{4:5.2f}".format(\
                                dRes[2],␣
→ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    ymdd = f.yMDD(dRes[1])
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:␣
→{4:5.2f}".format(\
                                dRes[2],␣
→ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    print("          Dasha ({0}) ending time: {1}.".format(dRes[2], mahaET))

#####
# Yogini Dasha Calculation
#####
def printYoginiDasha():
    dRes = f.yoginiDasha(lunarLongitude[0][0])
    mahaETD = (dRes[1] * 360)
    mahaET = dCurrent + relativedelta(days=+mahaETD)
    ymdd = f.yMDD(dRes[0])
    print(colored("\nYogini Dasha", 'blue'))
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:␣
→{4:5.2f}".format(\
                                dRes[2],␣
→ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    ymdd = f.yMDD(dRes[1])
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:␣
→{4:5.2f}".format(\
                                dRes[2],␣
→ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    print("          Dasha ({0}) ending time: {1}.".format(dRes[2], mahaET))

#####

```

```

# Astottari Maha Dasha Calculation
#####
def printAstottariMahaDasha():
    dRes = f.astottariDasha(lunarLongitude[0][0])
    astoBhukta, astoGraha = dRes[0], dRes[2]
    dRes = f.astottariMahaDasha(jBirthDateTime[1], jCurrentDateTime[1],
    ↳astoBhukta, astoGraha)
    mahaETD = (dRes[3] * 360)
    mahaET = dCurrent + relativedelta(days=+mahaETD)
    ymdd = f.yMDD(dRes[2])
    print(colored("\nAstottari Maha Dasha", 'blue'))
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:
    ↳{4:5.2f}".format(\
                                dRes[1],
    ↳ymdd[0], ymdd[1], ymdd[2], ymdd[3]))
    ymdd = f.yMDD(dRes[3])
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:
    ↳{4:5.2f}".format(\
                                dRes[1],
    ↳ymdd[0], ymdd[1], ymdd[2], ymdd[3]))
    print("          Dasha ({0}) ending time: {1}.".format(dRes[1], mahaET))

#####
# Astottari Antar Dasha Calculation
#####
def printAstottariAntarDasha():
    dRes = f.astottariDasha(lunarLongitude[0][0])
    astoBhukta, astoGraha = dRes[0], dRes[2]
    dRes = f.astottariMahaDasha(jBirthDateTime[1], jCurrentDateTime[1],
    ↳astoBhukta, astoGraha)
    astoMahaID, astoMahaBhukta = dRes[0], dRes[2]
    dRes = f.astottariAntarDasha(astoMahaID, astoMahaBhukta)
    mahaETD = (dRes[3] * 360)
    mahaET = dCurrent + relativedelta(days=+mahaETD)
    ymdd = f.yMDD(dRes[2])
    print(colored("\nAstottari Antar Dasha", 'blue'))
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:
    ↳{4:5.2f}".format(\
                                dRes[1],
    ↳ymdd[0], ymdd[1], ymdd[2], ymdd[3]))
    ymdd = f.yMDD(dRes[3])
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:
    ↳{4:5.2f}".format(\
                                dRes[1],
    ↳ymdd[0], ymdd[1], ymdd[2], ymdd[3]))
    print("          Dasha ({0}) ending time: {1}.".format(dRes[1], mahaET))

```

```

#####
# Vimshottari Maha Dasha Calculation
#####
→
def printVimshottariMahaDasha():
    dRes = f.vimshottariDasha(lunarLongitude[0][0])
    vimBhukta = dRes[0]
    dRes = f.vimshottariMahaDasha(jBirthDateTime[1], jCurrentDateTime[1],
→lunarLongitude[0][0], vimBhukta)
    mahaETD = (dRes[3] * 360)
    mahaET = dCurrent + relativedelta(days=+mahaETD)
    ymdd = f.yMDD(dRes[2])
    print(colored("\nVimshottari Maha Dasha", 'blue'))
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:
→{4:5.2f}".format(\
                                                    dRes[1],
→ymdd[0], ymdd[1], ymdd[2], ymdd[3]))
    ymdd = f.yMDD(dRes[3])
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:
→{4:5.2f}".format(\
                                                    dRes[1],
→ymdd[0], ymdd[1], ymdd[2], ymdd[3]))
    print("          Dasha ({0}) ending time: {1}.".format(dRes[1], mahaET))

#####
# Vimshottari Antar Dasha Calculation
#####
def printVimshottariAntarDasha():
    dRes = f.vimshottariDasha(lunarLongitude[0][0])
    vimBhukta, vimBhogya, vimGraha = dRes
    dRes = f.vimshottariMahaDasha(jBirthDateTime[1], jCurrentDateTime[1],
→lunarLongitude[0][0], vimBhukta)
    vimMahaID, vimMahaBhukta = dRes[0], dRes[2]
    dRes = f.vimshottariAntarDasha(vimMahaID, vimMahaBhukta)
    mahaETD = (dRes[3] * 360)
    mahaET = dCurrent + relativedelta(days=+mahaETD)
    ymdd = f.yMDD(dRes[2])
    print(colored("\nVimshottari Antar Dasha", 'blue'))
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:
→{4:5.2f}".format(\
                                                    dRes[1],
→ymdd[0], ymdd[1], ymdd[2], ymdd[3]))
    ymdd = f.yMDD(dRes[3])

```

```

        print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:␣
↪{4:5.2f}".format(\
                                                    dRes[1],␣
↪ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
        print("          Dasha ({0}) ending time: {1}.".format(dRes[1], mahaET))

#####
# Yogini Maha Dasha Calculation
#####
def printYoginiMahaDasha():
    dRes = f.yoginiDasha(lunarLongitude[0][0])
    yogiBhukta = dRes[0]
    dRes = f.yoginiMahaDasha(jBirthDateTime[1], jCurrentDateTime[1],␣
↪lunarLongitude[0][0],yogiBhukta)
    mahaETD = (dRes[3] * 360)
    mahaET = dCurrent + relativedelta(days=+mahaETD)
    ymdd = f.yMDD(dRes[2])
    print(colored("\nYogini Maha Dasha",'blue'))
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:␣
↪{4:5.2f}".format(\
                                                    dRes[1],␣
↪ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    ymdd = f.yMDD(dRes[3])
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:␣
↪{4:5.2f}".format(\
                                                    dRes[1],␣
↪ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    print("          Dasha ({0}) ending time: {1}.".format(dRes[1], mahaET))

#####
# Yogini Antar Dasha Calculation
#####
def printYoginiAntarDasha():
    dRes = f.yoginiDasha(lunarLongitude[0][0])
    yogiBhukta = dRes[0]
    dRes = f.yoginiMahaDasha(jBirthDateTime[1], jCurrentDateTime[1],␣
↪lunarLongitude[0][0],yogiBhukta)
    yogiMahaID, yogiMahaBhukta = dRes[0], dRes[2]
    dRes = f.yoginiAntarDasha(yogiMahaID, yogiMahaBhukta)
    mahaETD = (dRes[3] * 360)
    mahaET = dCurrent + relativedelta(days=+mahaETD)
    ymdd = f.yMDD(dRes[2])
    print(colored("\nYogini Antar Dasha",'blue'))

```

```

    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:␣
    ↳{4:5.2f}".format(\
                                dRes[1],␣
    ↳ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    ymdd = f.yMDD(dRes[3])
    print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:␣
    ↳{4:5.2f}".format(\
                                dRes[1],␣
    ↳ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
    print("          Dasha ({0}) ending time: {1}.".format(dRes[1], mahaET))

def toJulian(dString, tZone):
    try:
        dt = datetime.strptime(dString, '%d/%m/%Y %H:%M:%S')
    except ValueError as ve:
        print('ValueError Raised:', ve)

    hr = (dt.hour + (dt.minute/60) + (dt.second/3600))
    hrUTC = hr - tZone
    return swe.date_conversion(dBirth.year,dBirth.month,dBirth.day,hrUTC)

def printLunarPosition(dt):
    r = swe.set_sid_mode(swe.SIDM_LAHIRI,0,0)
    lunarLongitude = swe.calc_ut(dt[1],swe.MOON,swe.FLG_SIDEREAL)
    dms = toSDMS(lunarLongitude[0][0])
    print(colored("\nLunar position at birth time",'blue'))
    print("Lunar Sign: {0} Degree: {1} Minute: {2} Second: {3:5.2f}".format(\
        m.floor(dms[0]), m.floor(dms[1]), m.floor(dms[2]), dms[3]))

def toSDMS(lon):
    si = lon/30
    de = m.modf(si)[0]*30
    mn = m.modf(de)[0]*60
    se = m.modf(mn)[0]*60
    return [si,de,mn,se]

if __name__ == "__main__":
    ␣
    ↳#####
    # User Parameter dob = '23/08/1963 7:29:00' Date of Birth
    ␣
    ↳#####
    dob = '23/08/1963 7:29:00'
    cDate = '10/01/2015 13:56:00'
    tZone = 5.5 # time Zone
    # latitude = 24.50

```

```

# longitude = 93.5
↳ #####
try:
    dBirth = datetime.strptime(dob, '%d/%m/%Y %H:%M:%S')
    dCurrent = datetime.strptime(cDate, '%d/%m/%Y %H:%M:%S')
except ValueError as ve:
    print('ValueError Raised:', ve)
jBirthDateTime = toJulian(dob,tZone)
jCurrentDateTime = toJulian(cDate,tZone)
r = swe.set_sid_mode(swe.SIDM_LAHIRI,0,0)
lunarLongitude = swe.calc_ut(jBirthDateTime[1],swe.MOON,swe.FLG_SIDEREAL)

↳ #####
# Display Result
↳ #####
display(Markdown('<font color="blue"><h2>Dasha Calculation 0.01</h2><p>By.
↳ Dr. Manichandra Sanoujam</p></font>'))
printLunarPosition(jBirthDateTime)
printAstottariDasha()
printVimshottariDasha()
printYoginiDasha()
display(Markdown('<font color="blue"><h3>Dasha on prescribed date</h3></
↳font>'))
printAstottariMahaDasha()
printAstottariAntarDasha()
printVimshottariMahaDasha()
printVimshottariAntarDasha()
printYoginiAntarDasha()
printYoginiAntarDasha()

```

Dasha Calculation 0.01

By. Dr. Manichandra Sanoujam

Lunar position at birth time

Lunar Sign: 5 Degree: 19 Minute: 44 Second: 30.81

Astottari Dasha Calculation based on Kritikadi System

Bhukta Dasha (Budha): Year: 3 Month: 1 Day: 7 Danda: 52.93

Bhukta Dasha (Budha): Year: 13 Month: 10 Day: 22 Danda: 7.07

Dasha (Budha) ending time: 2028-09-20 16:45:45.284093.

Vimshottari Dasha

Bhukta Dasha (Chandra): Year: 7 Month: 3 Day: 20 Danda: 19.33
Bhukta Dasha (Chandra): Year: 2 Month: 8 Day: 9 Danda: 40.67
Dasha (Chandra) ending time: 2017-09-06 06:12:05.880365.

Yogini Dasha

Bhukta Dasha (Pingala): Year: 1 Month: 5 Day: 16 Danda: 3.87
Bhukta Dasha (Pingala): Year: 0 Month: 6 Day: 13 Danda: 56.13
Dasha (Pingala) ending time: 2015-07-23 12:23:13.176073.

Dasha on prescribed date

Astottari Maha Dasha

Bhukta Dasha (Budha): Year: 3 Month: 1 Day: 8 Danda: 9.05
Bhukta Dasha (Budha): Year: 13 Month: 10 Day: 21 Danda: 50.95
Dasha (Budha) ending time: 2028-09-20 10:18:45.284109.

Astottari Antar Dasha

Bhukta Dasha (Sani): Year: 0 Month: 5 Day: 4 Danda: 49.05
Bhukta Dasha (Sani): Year: 1 Month: 1 Day: 21 Danda: 50.95
Dasha (Sani) ending time: 2016-02-26 10:18:45.284109.

Vimshottari Maha Dasha

Bhukta Dasha (Chandra): Year: 7 Month: 3 Day: 20 Danda: 35.45
Bhukta Dasha (Chandra): Year: 2 Month: 8 Day: 9 Danda: 24.55
Dasha (Chandra) ending time: 2017-09-05 23:45:05.880381.

Vimshottari Antar Dasha

Bhukta Dasha (Ketu): Year: 0 Month: 0 Day: 20 Danda: 35.45
Bhukta Dasha (Ketu): Year: 0 Month: 6 Day: 9 Danda: 24.55
Dasha (Ketu) ending time: 2015-07-18 23:45:05.880381.

Yogini Antar Dasha

Bhukta Dasha (Siddha): Year: 0 Month: 4 Day: 6 Danda: 19.99
Bhukta Dasha (Siddha): Year: 0 Month: 0 Day: 13 Danda: 40.01
Dasha (Siddha) ending time: 2015-01-24 05:56:13.176089.

Yogini Antar Dasha

Bhukta Dasha (Siddha): Year: 0 Month: 4 Day: 6 Danda: 19.99
Bhukta Dasha (Siddha): Year: 0 Month: 0 Day: 13 Danda: 40.01
Dasha (Siddha) ending time: 2015-01-24 05:56:13.176089.

[]: