# astro

# March 25, 2020

```
[1]: 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:
    \hookrightarrow {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:
    \hookrightarrow {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])
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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:
\rightarrow {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:
\hookrightarrow {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:
\hookrightarrow {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:
\hookrightarrow {4:5.2f}".format(\
                                       dRes[2].
\rightarrow 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:
\hookrightarrow {4:5.2f}".format(\
                                         dRes[1],
\rightarrow 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:
\hookrightarrow {4:5.2f}".format(\
                                         dRes[1],
→ymdd[0],ymdd[1],ymdd[2],ymdd[3]))
               Dasha ({0}) ending time: {1}.".format(dRes[1], mahaET))
   print("
# 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)
   vmdd = f.vMDD(dRes[2])
   print(colored("\nAstottari Antar Dasha",'blue'))
   print("Bhukta Dasha ({0}): Year: {1:2d} Month: {2:2d} Day: {3:2d} Danda:
\hookrightarrow {4:5.2f}".format(\
                                         dRes[1].
\rightarrowymdd[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:
\hookrightarrow {4:5.2f}".format(\
                                         dRes[1]...
\rightarrow 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], u
→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:
\hookrightarrow {4:5.2f}".format(\
                                             dRes[1],
\rightarrow 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:
\hookrightarrow {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:
\hookrightarrow {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:
\hookrightarrow {4:5.2f}".format(\
                                             dRes[1],
\rightarrow ymdd[0], ymdd[1], ymdd[2], ymdd[3]))
                Dasha ({0}) ending time: {1}.".format(dRes[1], mahaET))
   print("
```

```
# 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:
\hookrightarrow {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: U
\hookrightarrow {4:5.2f}".format(\
                                        dRes[1],
\rightarrow 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:
\rightarrow {4:5.2f}".format(\
                                        dRes[1],
\rightarrow 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:
 \hookrightarrow {4:5.2f}".format(\
```

```
dRes[1],
\rightarrow 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("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"><h3>Lunar Postion</h3></font>'))
    printLunarPosition(jBirthDateTime)
    display(Markdown('<font color="blue"><h3>Dasha Calculation</h3></font>'))
    printAstottariDasha()
    printVimshottariDasha()
    printYoginiDasha()
    display(Markdown('<font color="blue"><h3>Dasha on prescribed date</h3></
 →font>'))
    printAstottariMahaDasha()
    printAstottariAntarDasha()
    printVimshottariMahaDasha()
    printVimshottariAntarDasha()
    printYoginiAntarDasha()
    printYoginiAntarDasha()
importing Jupyter notebook from func.ipynb
Lunar Postion
Lunar Sign: 5 Degree: 19 Minute: 44 Second: 30.81
Dasha Calculation
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.
```

# []: