Time in Heaven

In the usual time-system, we have two time-formats: 24-hour format and the 12-hour format. 08:00:00 (hours:minutes:seconds) in the 24-hour format is written as 8:00:00 A.M in the 12-hour format. 17:25:32 in the 24-hour format is written as 05:25:32 P.M. 00:00:00 in the 24-hour format is written as 12:00:00 midnight. 12:00:00 in the 24-hour format is referred as 12:00:00 noon.

In a place called `Heaven’, the people follow an eight-hour format.

(i) 00:00:00 in the 24-hour format is written as 08:00:00 **midnight**.

(ii) Time in the range, from 00:00:01 hours to 07:59:59 in the 24-hour format is written as the same time with a suffix **A.M.** For eg: 07:00:10 in the 24-hour format is written as 07:00:10 A.M. in the 8-hour format.

(iii) 08:00:00 in the 24-hour format is written as 08:00:00 **midmorning**.

(iv) Time in the range, from 08:00:01 to 15:59:59, in the 24-hour format is written as the time in the range, from 00:00:01 to 07:59:59 , with a suffix **B.M.** For eg., 09:11:13 in the 24-hour format is written as 01:11:13 B.M .

(v) 16:00:00 in the 24-hour format is written as 08:00:00 **midevening**.

(vi)Time in the range, from 16:00:01 to 23:59:59 in the 24-hour format is written as the time in the range from 00:00:01 to 07:59:59, with a suffix **C.M.**For e.g., 17:59:59 in 24-hour format is written as 01:59:59 C.M

Given the time in the 12-hour format, Write an algorithm and the subsequent code to convert the given time into the time in `Heaven’ (ie., in to an 8-hour format)

**Input format :**

Time in the 12-hour format, hh:mm:ss followed by A.M or P.M or midnight

**Output format :**

Time in the 8-hour format, hh:mm:ss followed by A.M or B.M or C.M or midnight or midmorning

**Illustration :**

**Input**

12:00:00 midnight

**Output**

08:00:00 midnight

**Input**

02:00:11 P.M

**Output:**

06:00:11 B.M

H=int(input())

M=int(input())

S=int(input())

x=input("A.M or P.M or noon or midnight")

if x== "A.M":

if H< 8:

H1=H

M1=M

S1=S

print(H1,":",M1,":",S1,"A.M")

elif H==8:

H1=H

M1=M

S1=S

print(H1,":",M1,":",S1,"midmorning")

else:

H1=H-8

M1=M

S1=S

print(H1,":",M1,":",S1,"B.M")

if x== "noon":

print("04",":",M,":",S,"B.M")

if x== "P.M":

if H<4:

H1=H+4

M1=M

S1=S

print(H1,":",M1,":",S1,"B.M")

elif H==4:

H1=H+4

M1=M

S1=S

print(H1,":",M1,":",S1,"midevening")

else:

H1=H-4

M1=M

S1=S

print(H1,":",M1,":",S1,"C.M")

if x== "midnight":

print(H1,":",M1,":",S1,"midnight")