***Problem:***

Given a time in [-hour AM/PM format](https://en.wikipedia.org/wiki/12-hour_clock), convert it to military (-hour) time.

**Note:** Midnight is  on a -hour clock, and  on a -hour clock. Noon is  on a -hour clock, and  on a -hour clock.

**Input Format**

A single string containing a time in -hour clock format (i.e.:  or ), where  and .

**Output Format**

Convert and print the given time in -hour format, where .

**Sample Input**

07:05:45PM

**Sample Output**

19:05:45

***Solution:***

#include <cmath>

#include<string.h>

#include<ctype.h>

#include <cstdio>

#include <vector>

#include <iostream>

#include <algorithm>

using namespace std;

int main() {

/\* Enter your code here. Read input from STDIN. Print output to STDOUT \*/

int hour, minute, second;

char char1, char2, colan;

cin>>hour >>colan >>minute >>colan >>second >>char1 >>char2;

if(hour==12 && char1=='A') { cout<<"00" ; }

//for the midnight 12am case --> 00 hours

if( (hour < 12 && char1=='A') ) {cout<<"0"<<hour; }

//from 12AM to 12PM ------- Midnight to noon

if(hour==12 && char1=='P') {cout<<hour; }

//for 12pm noon case;

if(hour < 12 && char1=='P' ) {cout<<hour+12; }

//from the 12pm of noon to 12am night case

(minute<10 ? cout<<":0"<<minute : cout<<colan<<minute);

(second<10 ? cout<<":0"<<second : cout<<colan<<second);

return 0;

}

----- Scroll down to the next for more elegant solution --------

***More Elegant solution:***

int main(){

int hour, minute, second;

char ch, char1;

cin>>hour >>ch >>minute >>ch >>second >>char1 >>ch;

hour= (hour<12 && char1=='P' ? hour+12 : (hour==12 && char1=='A' ? 0: hour ));

cout <<setw(2) <<setfill('0') <<hour <<":" <<setw(2) <<setfill('0') <<minute <<":"

<<setw(2) <<setfill('0') <<second;

//The setfill compensates for the missing 0

return 0;

}