Given a time in 12-hour AM/PM format, convert it to military (24-hour) time. Your program must contain three exception classes: invalidHr, invalidMin, and invalidSec. If the user enters an invalid value for hours, then the program should throw and catch an invalidHr object. Similar conventions for the invalid values of minutes and seconds.

**Note:**

Midnight is 12:00:00 AM on a 12-hour clock and 00:00:00 on a 24-hour clock. Noon is 12:00:00 PM on 12-hour clock and 12:00:00 on 24-hour clock

12:00AM=0:00

12:15AM=0:15

#include<iostream>

using namespace std;

class invalidHr{

    //TODO

};

 class invalidMin{

    //TODO

};

class invalidSec{

    //TODO

};

void check\_time(int hr, int min, int sec, string noon){

    //TODO

}

int main() {

check\_time(13,30,5,"PM");

    check\_time(1,20,30,"PM");

    check\_time(10,70,59,"AM");

check\_time(12,30,5,"AM");

    return 0;

}

**For example:**

| **Test** | **Result** |
| --- | --- |
| check\_time(13,30,5,"PM"); | Invalid Hour |
| check\_time(1,20,30,"PM"); | The time in 24-hour notation is 13:20:30 |
| check\_time(10,70,59,"AM"); | Invalid Minute |
| check\_time(12,30,5,"AM"); | The time in 24-hour notation is 00:20:30 |