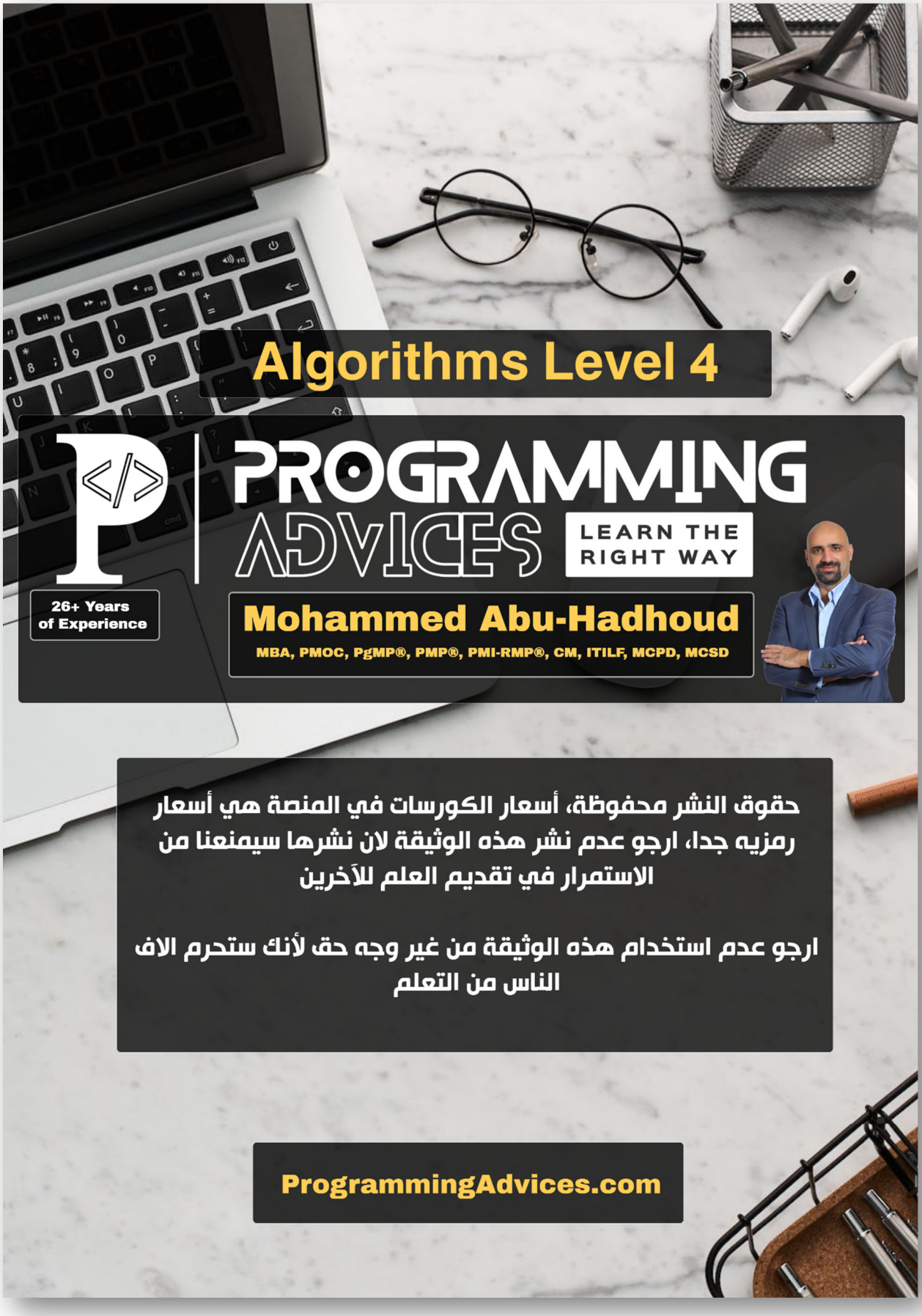
Algorithms Level 4
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حقوق النشر محفوظة، أسعار الكورسات في المنصة هي أسعار رمزيه جدا، ارجو عدم نشر هذه الوثيقة لان نشرها سيمنعنا من الاستمرار في تقديم العلم للآخرين
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```cpp
#include <iostream>
using namespace std;

bool isLeapYear(short Year)
{
    // if year is divisible by 4 AND not divisible by 100
  // OR if year is divisible by 400
  // then it is a leap year
   return (Year % 4 == 0 && Year % 100 != 0) || (Year % 400 == 0);
}

short NumberOfDaysInAMonth(short Month, short Year)
{
    if (Month < 1 || Month>12)
        return  0;

    if (Month == 2)
    {
        return  isLeapYear(Year) ? 29 : 28;
    }

    short arr31Days[7] = { 1,3,5,7,8,10,12 };

    for (short i = 1; i <= 7; i++)
    {
        if (arr31Days[i - 1] == Month)
            return 31;
    }

    //if you reach here then its 30 days.
    return  30;
}

short NumberOfHoursInAMonth(short Month, short Year)
{
    return  NumberOfDaysInAMonth(Month, Year) * 24;

}

int NumberOfMinutesInAMonth(short Month, short Year)
{
    return  NumberOfHoursInAMonth(Month, Year) * 60;
}

int NumberOfSecondsInAMonth(short Month, short Year)
{
    return  NumberOfMinutesInAMonth(Month, Year) * 60;
}
```

```
short ReadMonth()
{
    short Month;
    cout << "\nPlease enter a Month to check? ";
    cin >> Month;
    return Month;
}

short ReadYear()
{
    short Year;
    cout << "\nPlease enter a year to check? ";
    cin >> Year;
    return Year;
}

int main()

{
    short Year = ReadYear();
    short Month = ReadMonth();

    cout << "\nNumber of Days    in Month [" << Month << "] is "
        << NumberOfDaysInAMonth(Month, Year);

    cout << "\nNumber of Hours   in Month [" << Month << "] is "
        << NumberOfHoursInAMonth(Month, Year);

    cout << "\nNumber of Minutes in Month [" << Month << "] is "
        << NumberOfMinutesInAMonth(Month, Year);

    cout << "\nNumber of Seconds in Month [" << Month << "] is "
        << NumberOfSecondsInAMonth(Month, Year);

    system("pause>0");
    return 0;
}
```