

紅線處為需要處理的資料!

ISSUER_ID	OFFERING_DATE	OFFERING_YIELD	OFFERING_PRICE	MATURITY	INTEREST_FREQUENCY	FIRST_INTEREST_DATE	COUPON
1117	20100803	5.79816	99.320	20400815	2	20110215	5.750
1117	20100803	4.36422	99.082	20200815	2	20110215	4.250

可以得知:

- $r = 4.36422$
- $c = 4.250$
- $n = 20$
- 以不同的方式來計算 maturity date 和 settlement date 之間的天數,除以180求出w:
 - actual/actual 利用 float Actual()計算實際天數並且用isLeapYear()判斷是否為閏年
 - 30/360利用Thirty()計算天數

利用迴圈計算出dirty_price:

- 已知dirty_price = $c \cdot (1+r)^{-w} + c \cdot (1+r)^{-w-1} + \dots + c \cdot (1+r)^{-w-n+1} + 100(1+r)^{-w-n+1}$
 - 利用迴圈控制計算出 $\cdot (1+r)^{-w}$ 等比級數

利用相同方式求出YTM

執行截圖:

```
C:\Users\GameToGo\Desktop\財務工程\HW2\財工HW2.exe
Input Maturity Date (Year Month Date) :2020 08 15
Input Settlement Date (Year Month Date) :2010 08 03
Input bond yield:4.36422
Input coupon rate:4.250
=== Under actual/actual ===
Dirty Price=98.8924
Accrued interest=-0.188889
Clean Price=99.0813

===== Under 30/360 =====
Dirty Price=94.7593
Accrued interest=-4.39167
Clean Price=99.1509
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YTM:1.94766
Offering yield:4.36422

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Process exited after 37.07 seconds with return value 0
請按任意鍵繼續 . . .
```