1. 필요한 클래스 : assignment

2. ID 클래스 설계

* + 변수들 : 없음
  + 메소드 : main

3. main 메소드 설계

1)상수들

2)변수들

Int 연도

Int 천의자리=0

Int 백의자리=0

Int 십의자리=0

Int 일의자리=0

3)알고리즘

-순서도

main

yes

no

no

yes

no

yes

Int 천의자리, 백의자리, 십의자리, 일의자리,연도 변수선언

Scanner객체 scan생성

연도>=1000

천의자리 =0

If(연도/1000>=1)

“잘못 입력된 연도”출력

If(연도<1||연도>=5000)

“연도를 입력하세요 : “출력

연도 = scan.nextInt();

천의자리++;

연도-=1000;

If(연도/100>=1)

no

yes

no

연도>=100

yes

연도-=100;

백의자리++;

If(연도/10>=1)

no

yes

no

연도>=10

yes

연도-=10;

십의자리++;

일의자리 = 연도;

yes

“MF”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

If(천의자리==4)

no

천의자리>=0

no

yes

“M”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

천의자리--;

no

yes

yes

Else If(백의자리==4)

“CD”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

“CM”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

If(백의자리==9)

no

백의자리>=0

no

yes

If(백의자리>=5)

“D”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

yes

no

백의자리 -= 4;

“C”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

백의자리--;

yes

no

Else If(십의자리==4)

“XL”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

“XC”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

If(십의자리==9)

yes

no

십의자리>=0

no

yes

If(십의자리>=5)

“L”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

yes

no

십의자리 -= 4;

“X”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

십의자리--;

no

yes

Else If(일의자리==4)

“IV”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

“IX”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

If(일의자리==9)

yes

no

일의자리>=0

no

yes

If(일의자리>=5)

“V”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

yes

일의자리 -= 4;

“I”출력9999999999999999999999999999999999999999999999999999999999999999999999999999999;

`

일의자리--;

end