Assignment #2

February 19, 2022

[58]:
```
import datetime

spring_equinox = datetime.datetime(2022,3,29,9,33)
current_date = datetime.datetime.now()

print('Spring Equinox this year is:', spring_equinox)

spring = current_date < spring_equinox
days_to_spring = spring_equinox - current_date

if spring == True:
    print('Spring is coming in', days_to_spring.days, 'days')
else:
    print('Spring has sprung', abs(days_to_spring.days), 'days ago')
```

```
Spring Equinox this year is: 2022-03-29 09:33:00
Spring is coming in 37 days
```

[11]:
```
def Bond_Calculator():
    face_value = int(input('Face Value:'))
    coupon = int(input('Coupon Payment:'))
    coupon_frequency = int(input('Coupon Paid How Many Times a Year:'))
    ytm = int(input('Years to Maturity:'))
    interest_rate = int(input('Market Rate:')) / 100
    bond_price = 0

    for i in range(1,ytm+1):
        bond_price = bond_price + ((coupon * coupon_frequency) / pow((1 +␣
 ↪interest_rate), i))

    bond_price = "${:,.2f}".format(bond_price + (face_value / pow((1 +␣
 ↪interest_rate), ytm)))

    print('Price of the bond based on the above numbers is:', bond_price)

Bond_Calculator()
```

```
Face Value:1000
```

```
Coupon Payment:30
Coupon Paid How Many Times a Year:2
Years to Maturity:10
Market Rate:4
Price of the bond based on the above numbers is: $1,162.22
```

[ ]: