FIN325 - Homework 1
Due : February 4th

Problem 1 (20pts)

A corporation has the option to prepay (call) a bond with 4 years to maturity, \$50M in remaining principal, a 10% yearly rate, fixed and monthly payments. It can replace this bond with a 4 year bond with the same remaining payment structure. Prepayment penalties are \$750,000. How low must the yearly rate on the new bond be to justify calling the old bond (ignoring the option value of waiting to refi)?

Problem 2 (20pts)

Company XYZ just reported the following balance sheet and income statement for the past year:

Income statement	
Sales	6M
COGS	2M
SG&A	1M
Depreciation	2M
Interest paid	1M
Net Income before taxes	0M
Taxes on net income	0M
Net Income	0M

Assets		Liabilities and equity	
Cash	2M	Current liabilities (oper.)	2M
Other current assets	5M	ST Debt	5M
PP&E	10M	LT Debt	10M
Intangible Assets	7M	Preferred equity	2M
		Common equity	5M

1. Calculate and report the company's EBIT and EBITDA

2. The company is trading at a trailing EBITDA mutliple of 10. The market value of its liabilities equals their book value. All current assets other than cash are operating, as are all current liabilities. What is the underlined market value of its common equity?

Problem 3 (30pts)

This problem's goal is to compare and contrast the EBITDA multiples of Facebook (FB) and Boston Properties (BXP).

1. Report the most recent EBITDA multiple computed by Yahoo finance for both companies

2. Calculate EBIT and EBITDA (ttm). Report the details of your calculations.

3. Using Yahoo's estimate of enterprise value for each company and your EBITDA calculation, compute each company's EBITDA multiple.

4. Provide plausible explanations for why these very different corporations both trade at high EBITDA multiples. (No more than 5 sentences.)

Problem 4 (30pts)

Download the 3-statement projection assignment dataset from my webpage. Fill-up all 3 statements for 2020 and 2021 given the assumptions and conventions provided at the top of the file. I strongly recommend you use the supporting schedule template provided at the bottom of the file as part of your calculations. In your printed answer, only show your completed statements.