1. Suppose Lucent Techologies has an equity cost of capital of 10% , market capitalization of $10.8 billiion, and an enterprise value of $14.4 billion. Suppose Lupent’s cost of capital is 6.1% and its marginal tax rate is 35%
2. What is Lucent’s WACC?
3. If Lucent maintains a constant debt-equity ratio, what is the value of a project with average risk and the following expected free cash flows?

Year 0 1 2 3

FCF -100 50 100 70

1. If Lucent maintains its debt-equity, what is the debt capacity of the project in part (b)
2. Consider Lucent’s project in Problem 1 above
3. What is Lucent’s unlevered cost of capital?
4. What is the unlevered value of the project
5. What are the interest tax shields from the project? What is their present value?
6. Show that the APV of Lucent’s project matches the value computed using the WACC method.
7. Consider Lucent’s project in problem 1 above again.
8. What is the free cash flow to equity for this project?
9. What is its NPV computed using the FTE method? How does it compare with the NPV based on the WACC method?