Quiz: Assume the corporate tax rate is 40%, the personal tax rate on interest income is 20% and the personal tax rate on equity income is 10%. Determine the optimal capital structure for Robot Corporation if the firm has a 70% chance of having an annual EBIT of $4,000,000 and a 30% of having an annual EBIT of $5,000,000.

Note: You will need to do enough calculations to show that your answer is optimal.