Assignment 4 (BAN 501)

■ ABC Inc must make a decision on its current capacity for next year. Estimated profits (in $000s) based on next year's demand are shown in the table below.

Alternative	Low	High
Expand	$100	$200
Subcontract	$50	$120
Do Nothing	$40	$50

Hint: You may need to watch all 4 videos of the week before answering this question

Refer to the information above.

3-a. Which alternative should be chosen based on the maximax criterion?

3-b. Which alternative should be chosen based on the maximin criterion?

3-c. Which alternative should be chosen based on the Lapalce criterion?

3-d. Which alternative should be chosen based on criterion of realism with alpha = 0.7?

3-e. Which alternative should be chosen based on the minimax regret criterion?

Assume that ABC Inc. has hired a marketing research firm that provided additional information regarding next year's demand. Suppose that the probabilities of low and high demand are assessed as follows: P(Low) = 0.4 and P(High) = 0.6.

3-f. Which alternative should be chosen using the expected monetary value (EMV) criterion?

3-g. What is the expected value under perfect information (EVPI)?

Refer to the information above. Assume that ABC Inc. has hired a marketing research firm that provided additional information regarding next year's demand. Suppose that the probabilities of low and high demand are assessed as follows: P(Low) = 0.4 and P(High) = 0.6. Develop a decision tree for this problem and analyze the following questions.

3-h. Using the expected opportunity loss (EOL) criterion, which alternative should be chosen?