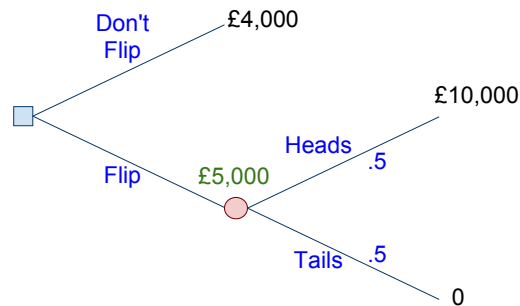


Decision Tree Analysis using Precision Tree

Last updated: October 1, 2012.

In this lab session we will learn to use software to build decision trees. We will create the decision tree for the following situation:

“You are offered the opportunity of flipping a coin. If you choose to not flip you get a reward of 4 thousand. If you flip and the coin falls on heads you get a reward of 10 thousand. If you flip and the coin falls on tails you get nothing.”



Steps:

- Build the tree:
 1. Open up the *precision tree* package.
 2. Click on the Decision Tree icon and place the root of your tree anywhere in the worksheet.
 3. Create the decision node by double clicking the leaf of your tree. Modify the branch properties of your tree before finishing.
 4. Create the random event node by double clicking on the leaf of your Flip decision. Modify the branch properties of your tree before finishing.
- Analysis:
 1. Click on the Decision Analysis icon and identify the suggested policy.
 2. Perform a two way Sensitivity Analysis by changing the returns for:
 - *not flipping* (currently 4,000), between 0 and 10 thousand.
 - *obtaining heads* (currently 10,000), between 0 and 10 thousand.

If you have time attempt to build the following tree from the notes:

