Assignment 9: Decisions and Loops

## A. Decision Tree

Describe a decision process that you will implement on your product website. It must meet the following requirements:

- The decision process must have at least three decision nodes.
- Include a description of each decision node and its branches.
- Include why each branch is leading to the final decision that it leads to.

The design process I will implement on my product website is one that selects a random review and a random list to feature on the homepage. There will be 5 random reviews to select from and 5 random lists to select from. A random number between 0 and 5 will be generated for both reviews and lists to select which entry to choose. The review or list with the most likes will be weighted slightly higher with 2 of the 6 possible random numbers picking it.

## Featured Review Branch Choices

- If the random number is 0, pick review 1.
- If the random number is either 1 or 2, pick review 2. This review is the review with the most likes and is therefore weighted higher.
- If the random number is 3, pick review 3.
- If the random number is 4, pick review 4.
- If none of the above, pick review 5.

## Featured List Branch Choices

- If the random number is either 0 or 1, pick list 1. This list is the list with the most likes and is therefore weighted higher.
- If the random number is either 2, pick list 2.
- If the random number is 3, pick list 3.
- If the random number is 4, pick list 4.
- If none of the above, pick list 5.

## **B. Flowchart**

Draw a flowchart of your decision tree using the flowchart conventions shown in the examples above. A summary of the flowchart conventions are given in the following:

