Intro to Python

Exercise : Decision Tree

Assignment

This exercise is designed to give you experience in writing if/elif/else control structures. These structures allow a program to make decisions based on the input to the program.

There is one program, but you will have several opportunities to write decisions in your program.

Like Counting (count_likes.py)

The latest fad in fun monster card collecting games is appropriately call TrendyMon. Initially, there are 64 different trendymon cards. Each creature is characterized by a name, a color, a size, and a personality.

Three different friends, (Yua, Hina, and Sora) have different tastes in trendymon. Your mission (should you choose to accept it) is to create a decision structure in a program that is able to predict whether each of these friends likes or does not like a particular trendymon. You will be given an English description of each of their likes.

Yua likes all amber colored trendymon. She doesn’t like any camel colored trendymon. She only likes aqua colored trendymon if they are small, and she likes all cinnabar colored trendmon if they are surly.

Hina likes all tiny trendymon, except the hungry ones. She likes spunky, large trendymon of any color. All sweet, aqua trendymon are wonderful for her. She thinks amber, small, spunky trendymon are the best. All others are not liked by Hina.

Sora likes all large trendymon. He thinks all tiny trendymon are yucky. Medium and small trendymon are liked by him, if they are not spunky and not amber colored.

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- Decision Tree