1. A given agent in this model is initialized with two sets to represent the known/assumed group preferences and group weights of the same agent, as described below:

   - Preference set p_a for an agent a is generated with a uniform distribution such that:
   $$p_{ai} = \frac{n}{100};\ n \sim u(0,100);\ n \in \mathbb{N}$$

   - Weight set w_a for an agent a is generated with a normalized Gaussian distribution such that:
   $$w_{ai} = \frac{4}{\sum w_i} w_i\ ; w_i \sim N(\mu = 0.5, \sigma = 1);\ w_i \in \mathbb{R}$$

2. Agents calculate their decisions given the formula below, where S, w_a *and* p_a represent the set of all agents in the group, and the sets of group weights and preferences for a given agent a respectively:
$$d_a: \sum_{i \in S} w_{ai} p_{ai} > 0.5$$

3. Agents broadcast the decision made per the formula above to the rest of the group, which triggers all receiving agents in the group to update their preference sets notated p_a.

```
def receive(decision, sender):

if decision is True:
        preferences.set(message.sender, 1)
else preferences.set(message.sender, 0)
```

   - A constant group size of 4, and calculations run in the same order per named agent for all simulations aim to investigate the scenario given in Harvey's 1974 article as closely as possible.
   - Each run of the program simulates a single group given the steps and criteria above.
   - Program does not require any input.
   - Output is a series of logs such as below:

```
[INFO] [06/17/2019 03:47:56.850] [Abilene0-akka.actor.default-
dispatcher-9] [akka://Abilene0/user/wife] Self-preference for
wife: 0.91
[INFO] [06/17/2019 03:47:56.850] [Abilene0-akka.actor.default-
dispatcher-9] [akka://Abilene0/user/wife] Decision fuzzy value
for wife: 0.402517986415334
[INFO] [06/17/2019 03:47:56.850] [Abilene0-akka.actor.default-
dispatcher-9] [akka://Abilene0/user/group] Decision received
(from wife): false
```