## Chapter-4

## **Result Discussion**

The eventual output is a comparison of different algorithms we used in multi-criteria Decision-Making. This can help in selection of an alternative either optimally or according to the user's needs. The weight changes reflect the alternatives' score according to a given algorithm given the same data.

One of the only metrics to compare in case of multi-criteria Decision-Making is sensitivity analysis. Sensitivity analysis is a technique used to study how the variation (uncertainty) in the output of a model can be apportioned, qualitatively or quantitatively, to different sources of variation in the input of a model. In MCDM, different criteria are often assigned weights based on their relative importance. Sensitivity analysis involves varying these weights to see how changes affect the overall rankings or decisions. This helps in understanding the robustness of the decision-making process to changes in weights.

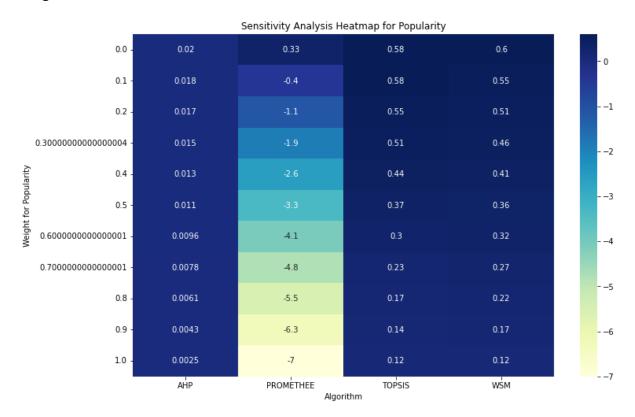


Fig 4.1 Heatmap for Sensitivity Analysis