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Manual: Ant Colony Optimisation Teaching Tool

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1 Accessing the Teaching Tool

1.1 Online

- Visit the link antsp.herokuapp.com

1.2 Running Locally

1.2.1 Requirements

- Python 2. or 3. - https://www.python.org/downloads/

- pip - https://pip.pypa.io/en/stable/installing/

1.2.2 Running the program

1. Navigate to the antsp folder using a terminal.

2. Install the required program modules using: sudo pip install -r requirements.txt

3. Run the program locally: python app.py

4. Visit the link: 127.0.0.1:5000 in a browser to access the Teaching Tool

2 Using The Tool

1. Select an instance from the dropdown list on the form.

2. Enter the desired parameters, the values already filled in are a good start to producing optimal solutions but feel free to explore different combinations and how they affect performance.

3. Click solve, the console will now dynamically update.

4. On completion, the error rate and run-time are availble in the console and the distance of the final solution is displayed in the graph title. The known optimal solution is also displayed for comparison.