RRT:

- To run RRT code run **python3 RRT.py**
- Here the start and goal coordinates are given in common across all the algorithms to compare the results.
- After running the program, pygame displays the nodes explored by RRT and the Final Path.
- Time taken is displayed in seconds

RRT-Connect:

- To run RRT-Connect code run **python3 RRT_Connect.py**
- Here the start and goal coordinates are given in common across all the algorithms to compare the results.
- After running the program, pygame displays the nodes explored by RRT-Connect and the Final Path.
- Time taken is displayed in seconds

Improved RRT-Connect:

- To run RRT-Connect code run **python3 Improved_RRT_CONNECT.py**
- Here the start and goal coordinates are given in common across all the algorithms to compare the results.
- After running the program, pygame displays the nodes explored by Improved RRT-Connect and the Final Path.
- Time taken is displayed in seconds

All the algorithms save the output videos as “*.mp4”.

Libs used:

- **cv2:** Library for image and video processing.
- **numpy**: Library for numerical computations.
- **heapq:** Library for priority queue operations.
- **time:** Library for measuring time intervals
- **pygame:** Library for handling graphics, audio, and user input.
- **sys:** Library for system-level operations and parameters.
- **math:** Library for mathematical functions.
- **matplotlib.pyplot**: Library for data visualization.