This folder contains the API for our ORCSolver, the source code for ORCSolver and the other three methods we compared to, and also timing results.

API\_ORCSolver.pdf includes the API of ORCSolver which can be used to specify layouts.

Experiments.xlsx includes the timing results for the four methods and different patterns. We conducted the experiments on a laptop with an Intel i5 CPU and measured the average execution time over 10 runs.

Code folder contains all the source code for all the four methods as mentioned in the paper (ORCSolver, ‘’Pure Z3’’, ‘’QP for Flows’’, ‘’Pure Branch & Bound’’). We also provide sample code for some layout patterns and the code generating examples in our teaser and video. Our API allows us to plug in different solvers for different ORC patterns (including ORCSolver, ''QP for Flows'', and ''Pure Branch & Bound'').

Installation:

1. To run ORCSolver, ''QP for Flows'', or ''Pure Branch & Bound'' based on our API, you need to install Python3 with GUI package Tkinter and a Python-embedded language for convex optimization problems CVXPY.
2. To run Z3 code, you need to install Python2 with GUI package Tkinter and Microsoft Z3 Solver.