Uzochi Dimkpa
Advection
ITCS 5182-001
High Performance Computing
Prof. Erik Saule
August 27, 2023

1. The algorithm takes approximately $\boxed{0.000980926}$ seconds with an $N = 103$ and $dt = 0.0009$

2. The algorithm takes approximately $\boxed{0.092342}$ seconds with an $N = 1003$ and $dt = 0.00009$