

AUTOMATA THEORY

PROGRAMMING ASSIGNMENT

QUESTION – 1:

Submission Format is 2021101020_q1.zip

./src

./q1

./q2

./q3

report.pdf

➤ q1:

**For running q1, we go to the src directory and run
python3 q1/rule.py**

Logic for q1:

**We go to each block and if it is white and it
has its left neighbour black, then it becomes black.**

➤ q2:

**For running q2, we go to the src directory and run
python3 q2/rule.py**

Logic for q2:

**We go to each block and if it is black, then if it
has 1 or no neighbours, then it becomes white. Also if it
has 4 or more neighbors, then it becomes white. Also, if it
has 2 or 3 neighbours, it doesn't change.**

**If it is white, then if it has 3 neighbours ,then
it becomes black.**

➤ **q3:**

**For running q3, we go to the src directory and run
python3 q3/rule.py**

Logic for q3:

**We go to each block and if the neighbour
above it or below it is black, then make it black.**