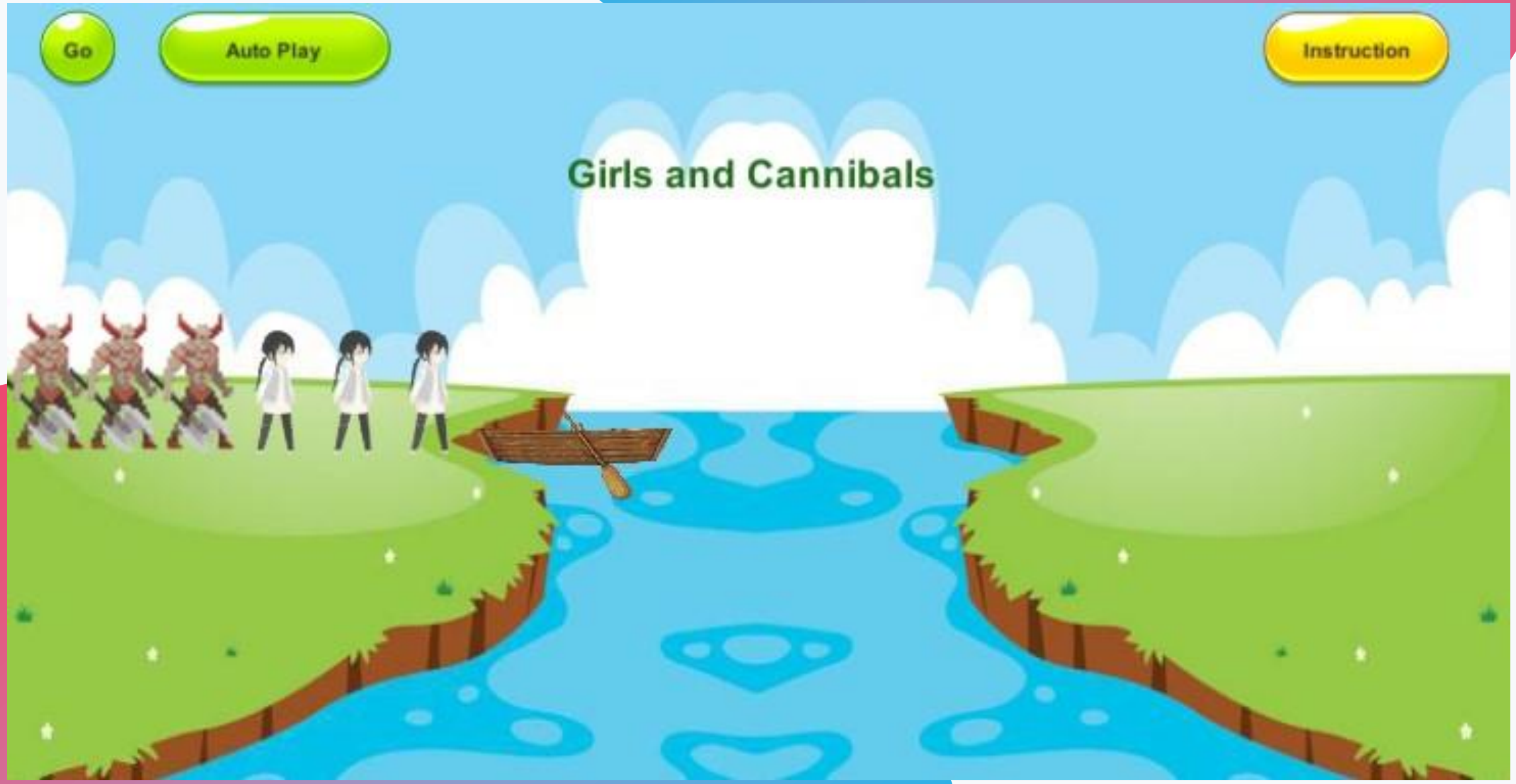

Go
Auto Play
Instruction
Girls and Cannibals

OVERVIEW

In the Girls and cannibals problem, three girls and three cannibals must cross a river using a boat which can carry at most two people, under the constraint that, for both banks, if there are girls present on the bank, they cannot be outnumbered by cannibals (if they were, the cannibals would eat the girls). The boat cannot cross the river by itself with no people on board. And, in some variations.

GOALS:-

- There is 1 boat available that can carry at most 2 people and that they would like to use to cross the river.

USED TECHNOLOGY:-

- **UNITY**
- **C#**
- **Desktop**

PEAS :--

Performance Measure: Safe **and Speed**

Environment: 3 Cannibals & 3Girls Boat & left and Right of the

River Actuators: Boat & Oars

Sensors: Screen

ODESA :--

Observability : Fully observable

Deterministic : Strategic

Episode : Sequential

Static : Semi - Dynami

Agent : Single

Problem Formulation:

Initial state:

3 missionaries,3 cannibals and the boat are on the near bank.

Successor Function:

Move the boat containing some set of occupants across the river to the other side.

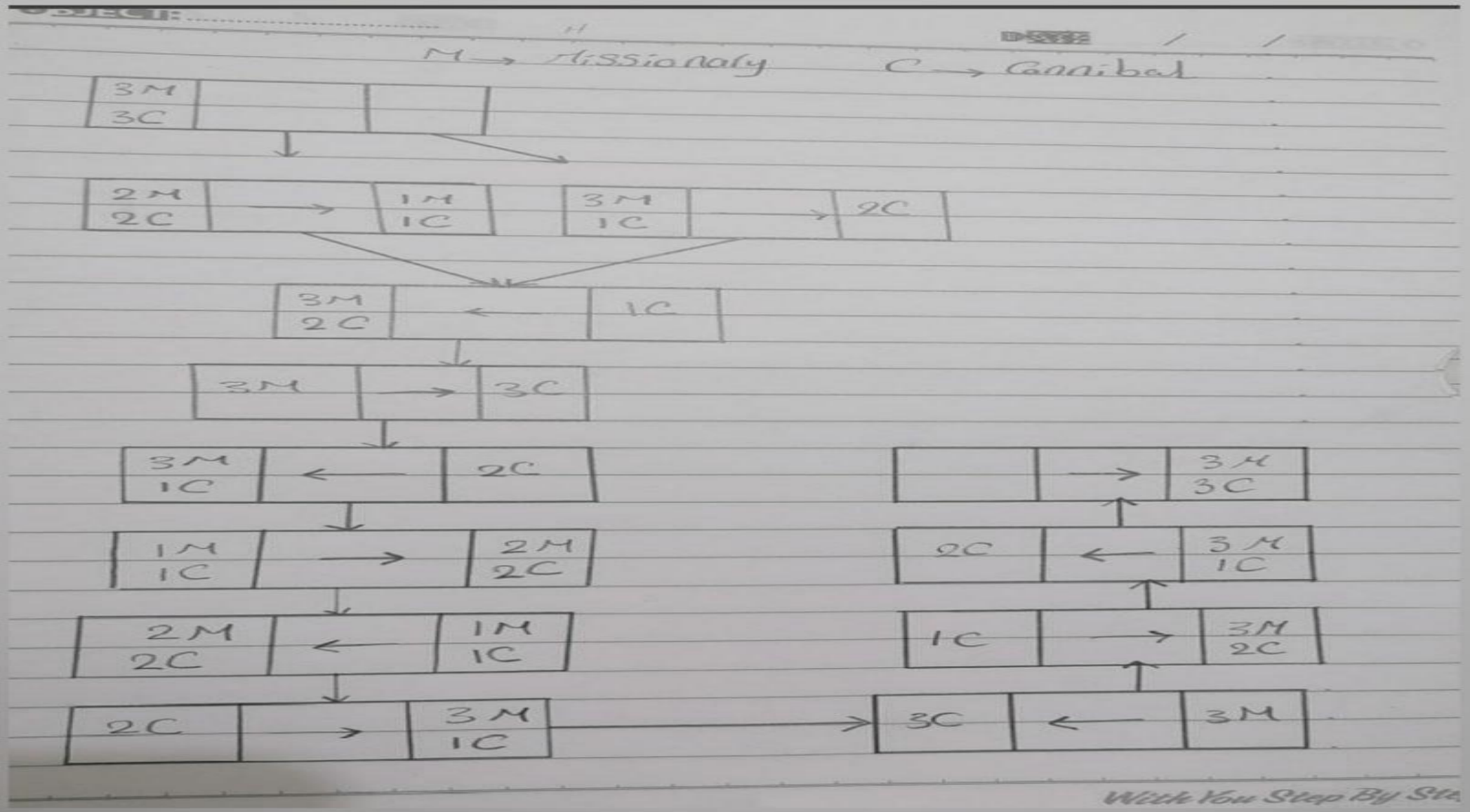
Goal Test:

Move all the missionaries and cannibals across the river.

Path cost :

Requires minimum number of moves.

Tree Search:


M → Missionary
C → Cannibal
3M 3C
2M 2C
1M 1C
3M 1C
3M 2C
1C
3M
3C
2C
1M 1C
2M 2C
2M 2C
1M 1C
2C
3M 1C
3C
3M
1C
3M 2C
2C
3M 1C
3M 3C

Agent Type :-

Goal Based Reflex Agent.

TEAM MEABERS:

- Kholoud Waleed Elsherbeny — Sec 6
- Rabab Osama Mahmoud — Sec 6
- Alaa Mahmoud Abdelrahman — Sec 5