Step 2   Step 5

Cost
Heuristic
CostSoFar

Start

Legend box (action template):
preconditions
pendingInGame
effects

Initial state (yellow box):
- range = 0
- guardsAmount = 20
- totalGuards = 20
- visibility = 0
- hp = 100
- targetLocation = studyLocation == totalLocations
- studyLocations = 0
- totalLocations = 5
- weapon = "none"
- inRange = false
- money = 1
- agentMoney = 100

Goal state (green box):
- visibility = 0
- hp = 100
- targetLocation = true
- weapon = "sniper"
- money = 1000

RestInTheCommune
COST:2
visibility > 0

visibility -= 5
hp += 2

StudyLocations
COST:1
TargetLocation = false

locationVisited += 1

StealMoney
COST:2
visibility < 60

money += agentMoney
visibility += 10

Health
COST:6
visibility < 10

hp = 100

KillGuardGun
COST:3
visibility < 100
weapon == "gun"
hp > 40
inRange = true

guardsAmount -= 1
hp -= 10
visibility += 20

KillGuardKnife
COST:6
visibility < 50
hp > 70
weapon == "knife"
inRange = true

guardsAmount -= 1
hp -= 50
visibility += 40

KillGuardSniper
COST:2
visibility < 50
hp > 80
weapon == "sniper"
inRange = true

guardsAmount -= 1
visibility += 10

KillTargetSniper
COST:3
guards < 0.5 * totalGuards
hp > 99
visibility < 10
weapon == "sniper"
inRange = true

visibility += 30

KillTargetGun
COST:3
guards < 0.5 * totalGuards
hp > 99
visibility < 30
weapon == "gun"
inRange = true

visibility += 100
hp -= 5

KillTargetKnife
COST:10
guards < 0.7 * totalGuards
hp > 99
visibility < 10
weapon == "knife"
inRange = true

visibility += 200
hp -= 60

BuyKnife
COST:3
visibility < 500
weapon != "knife"
money > 100

money -= 100
range = 10

BuyGun
COST:4
visibility < 50
weapon != "gun"
money > 500

money -= 500
range = 50

BuySniper
COST:5
visibility < 50
weapon != "sniper"
money > 1000

money -= 1000
range = 100

Tree nodes:

(node) 3
- visibility = 0
- hp = 100
- targetLocation = false
- weapon = "none"
- money = 1
- guardsAmount = 20
- studyLocations = 0

StudyLocation → studyZone 1 4

(node) 3
- visibility = 0
- hp = 100
- targetLocation = false
- weapon = "none"
- money = 1
- guardsAmount = 20
- studyLocations = 1

StudyLocation → studyZone 1 8

(node) 3
- visibility = 0
- hp = 100
- targetLocation = false
- weapon = "none"
- money = 1
- guardsAmount = 20
- studyLocations = 2

StealMoney → hasMoreMoney 2 10

(node) 4
- visibility = 10
- hp = 100
- targetLocation = false
- weapon = "none"
- money = 101
- guardsAmount = 20
- studyLocations = 0

StealMoney → hasMoreMoney 2 6

(node) 4
- visibility = 10
- hp = 100
- targetLocation = false
- weapon = "none"
- money = 101
- guardsAmount = 20
- studyLocations = 0

StudyLocation → studyZone 1 10

(node) 4
- visibility = 10
- hp = 100
- targetLocation = false
- weapon = "none"
- money = 101
- guardsAmount = 20
- studyLocations = 1

StealMoney → hasMoreMoney 2 12

(node) 4
- visibility = 10
- hp = 100
- targetLocation = false
- weapon = "none"
- money = 201
- guardsAmount = 20
- studyLocations = 0

buyKnife → hasKnife 3 13

(node) 4
- visibility = 10
- hp = 100
- targetLocation = false
- weapon = "knife"
- money = 1
- guardsAmount = 20
- studyLocations = 0

Right side nodes:

studyZone 1 10
(node) 4
- visibility = 10
- hp = 100
- targetLocation = false
- weapon = "none"
- money = 101
- guardsAmount = 20
- studyLocations = 1

hasMoreMoney 2 12
(node) 4
- visibility = 10
- hp = 100
- targetLocation = false
- weapon = "none"
- money = 201
- guardsAmount = 20
- studyLocations = 0

hasKnife 3 13
(node) 4
- visibility = 10
- hp = 100
- targetLocation = false
- weapon = "knife"
- money = 1
- guardsAmount = 20
- studyLocations = 0