- Total : 3 missionaris , 3 cannibals

- State [ ( # missionaries on LEFT, # cannibals on LEFT, # boat side ) ( # missionaries on Right, # cannibals on Right, # boat side ) ]

  + 0 = LEFT , + 1 = Right

- Action :

  Carry ( # missionaries, # cannibles )

- Legal move : # missionries > # cannibles

carry ( 3 , 0 )  carry ( 2, 0 )

carry ( 3, 1 )  carry ( 2, 1 )

carry ( 3, 2 )  carry ( 2, 2 )

carry ( 3, 3 )  carry ( 1, 1 )

- Illegal move:

# missionaries < # cannibals

OR # M = 0 & # C = 0

* carry (0, 0)
  carry (0, 1)
  carry (0, 2)
  carry (0, 3)
  carry (1, 2)
  carry (1, 3)
  carry (2, 3)

Next state:

new state ([(State Left), (State Right)], Action)

Goal state:

[(0, 0, 1), (3, 3, 1)]