**Answer2.**

**Initial State:**

**Predicates:** Clear(x)-Nothing on the side of the river(Valid Inputs: left and right)

ON(position,person)-Lets us know position of the person.

1. **Action**(MoveChildrenRight(child,child,left,right))

**Precond:**

Clear(right) AND On(left,c) AND On(left,c)

**Effect:**

On(right,c) AND On(right,c)

1. **Action**(MoveChildLeft(child,left,right))

**Precond:**

(On(right, c) AND On(right,c)

On(left, a) AND On(left,a)

**Effect:**

On (right, c) AND NOT(right,c)

On(left,c) AND On(left,a) AND On(right,a)

1. **Action**(MoveAdultRight(adult,left,right))

**Precond:**

On(right,c)

On(left,a)And On(left,a2)And On(left,c)

**Effect:**

On(right,c) And On(right,a)

On(left,a) And On(left,a) And NOT(On(left,a))