In [ ]:

```
class State:
    def _init_(self, pai, rainhas, linha): #index linha da rainha
        self.pai = pai
        self.rainhas = rainhas
        self.linha = linha

def showState(s):
    print(f'{s.rainhas}')

def initialState():
    return State(None, [0, 0, 0, 0, 0, 0, 0, 0], 0)

def goal(s):
    return

def valido(s):
    return True

def expand(s):
    ret = []

    for i in range(8):
        copia = State(s.pai, s.rainhas.copy(), s.linha)
        copia.rainhas[s.linha] = i
        filho = State(s, copia.rainhas, s.linha+1)
        if(valido(s)):
            ret.append(filho)
    return ret

def showPath(s):
    if(s == None):
        return
    showPath(s.pai)
    showState(s)

queue = []

def enqueue(s):
    queue.append(s)

def dequeue():
  return queue.pop(0)

s = initialState()
enqueue(s)

while(queue):
    s = dequeue()

    if(goal(s)):
        showPath(s)
        break

    children = expand(s)
    for child in children:
        enqueue(child)
```