

miss-conn

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1 program no: -3

2 Description

Missionaries and Cannibals is a problem in which 3 missionaries and 3 cannibals want to cross from the left bank of a river to the right bank of the river. There is a boat on the left bank, but it only carries at most two people at a time (and can never cross with zero people).

3 solution

4 code

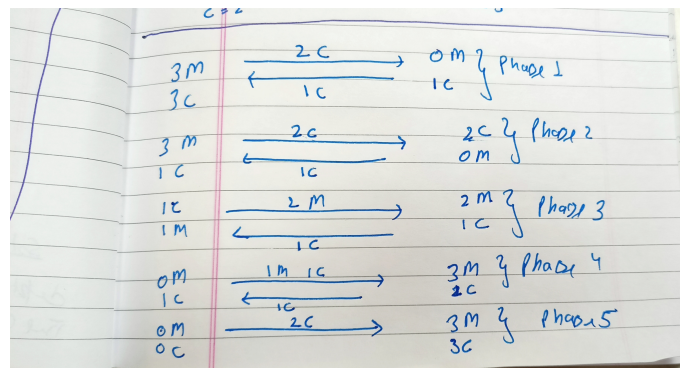


Figure 1: Caption

```

M1=3
C1=3
M2=0
C2=0
print("Initial state = (3M,3C,Bank-1)")
print("Goal state = (3M,3C,Bank-2)")
while ((M2 != 3) or (C2!=3)):
    r = int(input("Enter rule"))
    if(r == 1): #(1M,0C) from left to right
        M1+=1
        M2+=1
    elif(r == 2): #(2M,0C) from left to right
        M1+=2
        M2+=2
    elif(r == 3):#(1M,1C) from left to right
        M1+=1
        C1+=1
        M2+=1
        C2+=1
    elif(r == 4):#(0M,1C) from left to right
        C1+=1
        C2+=1
    elif(r == 5):#(0M,2C) from left to right
        C1+=2
        C2+=2
    elif(r == 6):#(1M,0C) from right to left
        M1-=1

```

4s completed at 10:31 AM

Figure 2: Caption

```

        M1+=1
        M2+=1
    elif(r == 7):#(2M,0C) from right to left
        M1+=2
        M2+=2
    elif(r == 8):#(1M,1C) from right to left
        M1+=1
        C1+=1
        M2+=1
        C2+=1
    elif(r==9):#(0M,1C) from right to left
        C1+=1
        C2+=1
    elif(r==10):#(0M,2C) from right to left
        C1+=2
        C2+=2
    print (M1, C1)
    print (M2, C2)
    if((M1>0 and M1<C1) or (M2>0 and M2<C2)):
        print("dead")
        break
Initial state = (3M,3C,Bank-1)
Goal state = (3M,3C,Bank-2)
Enter rule!

```

4s completed at 10:31 AM

Figure 3: Caption