

Monte Hall

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import random

doors = [0]*3
goat_doors = [0]*2
swap = 0
dont_swap = 0
x = random.randint(0,2)
doors[x] = 'BMW'
count = 0
while(count < 10):
    for i in range(0,3):
        if i == x:
            continue
        else:
            doors[i] = 'Goat'
            goat_doors.append(i)
    choice = int(input("Enter your choice "))
    door_open = random.choice(goat_doors)
    while(door_open==choice):
        door_open = random.choice(goat_doors)
    ch = input("are want to swap y/n ")
    if ch == 'y':
        if(doors[choice]=='Goat'):
            print("player won")
            swap += 1
        else:
            print("Player lost")
    else:
        if(doors[choice] == 'Goat'):
            print("Player lost")
        else:
            print("Player won")
            dont_swap += 1
    count += 1
print(swap)
print(dont_swap)
```

Rock Paper Scissor

```
def rock_paper_scissor(num1,num2,bit1,bit2):
    p1 = int(num1[bit1])%3
    p2 = int(num2[bit2])%3
    if(player1[p1]==player2[p2]):
        print("Match draw")
        print("Player one chose ", player1[p1])
        print("Player two chose ",player2[p2])
    elif(player1[p1]=='Rock' and player2[p2]=='Paper'):
        print("Player two won")
        print("Player one chose ", player1[p1])
        print("Player two chose ",player2[p2])
    elif (player1[p1]=='Paper' and player2[p2]== 'Scissor'):
        print("Player two won")
        print("Player one chose ", player1[p1])
        print("Player two chose ",player2[p2])
    elif (player1[p1]=='Scissor' and player2[p2]== ' Rock'):
        print("player two won")
        print("Player one chose ", player1[p1])
        print("Player two chose ",player2[p2])
    else:
        print("player one won")
        print("Player one chose ", player1[p1])
        print("Player two chose ", player2[p2])
player1 = {0: 'Rock', 1:"Paper", 2:"Scissor"}
player2 = {0: "Paper", 1:"Rock", 2:"Scissor"}
while(1):
    num1 = input("Player 1 , Enter your choice ")
    num2 = input("Player 2 , Enter your choice ")
    bit1 = int(input("player 1, Enter the secret bit position "))
    bit2 = int(input("Player 2, Enter the secret bit position "))
    rock_paper_scissor(num1,num2,bit1,bit2)
    ch = input("Are you want to continue? y/n ")
    if (ch == 'n'):
        break
```