

# **CASE STUDY 037**

## **[Python]**

# **Monty Hall Probabilities Trial**



Here are some clues in case you are stuck with the case study:

1. To generate a random integer, you can use `numpy.random`, specifying the range:

```
import numpy as np  
  
np.random.randint
```

2. After you have a random integer, you can return the correspondent game:

```
if door == 1:  
    return {'door1': 'car', 'door2': 'goat', 'door3': 'goat'}
```

3. To choose the door, you can use the function `randint` like this:

```
return 'door' + str(np.random.randint(1, 4))
```

4. If you have a list of objects, you can choose one of them using the function `choice` :

```
np.random.choice(options)
```

5. To open the door, you should first check what doors can be open. After that, choose one randomly:

```
options = []  
  
for door in game:  
    if game[door] != 'car' and chosen_door != door:  
        options.append(door)  
  
game[np.random.choice(options)] = 'open'  
  
return game
```