edX

# Exercise 1B Round Robin
## Exercise 2.1B: Round Robin

In this exercise, you will implement a round-robin policy.

Make sure that you have:

1. Completed the setup requirements as described in the Set Up Lab Environments section.

2. Completed the Exercise 2.1A: Greedy

Now, run jupyter notebook and open the "Ex2.1B Round Robin.ipynb" notebook under **Module 2** folder.

1. Examine the notebook.

2. Your task is to implement a round-robin policy: that is "pulling" the arms in round robin fashion.
   So for example, if you have three arms, the sequence will be arm 1, arm 2, arm 3 and then back to arm 1, and so on, until the trials finishes.

3. We have given you some boiler plate code, you only need to modify the part as indicated.

4. Once you have done that, run the notebook (don't change any parameter), observe the results, and answer the following questions.

## Lab Question

1.0/1.0 point (graded)

Which of the following resembles the number of times each arm was pulled?

○ [ 9996.0 1.0 1.0 1.0 1.0]

○ [ 201.0 9195.0 217.0 180.0 207.0]

◉ [ 2000.0 2000.0 2000.0 2000.0 2000.0]
  ✔

○ [ 1.0 1.0 9996.0 1.0 1.0]

○ [ 196.0 214.0 9175.0 197.0 218.0]

| Submit | You have used 1 of 2 attempts |

## Lab Question

1.0/1.0 point (graded)

Did the round-robin beat the greedy algorithm in this case?

○ Yes, because the greedy algorithm locks into a sub-optimal action

○ Yes, because the round-robin will **always** pick the best action

○ No, the greedy algorithm will **always** beat the round-robin

◉ No, in this case the greedy algorithm even with sub-optimal action still perform
  relatively better than the round-robin
  ✔

| Submit | You have used 1 of 2 attempts |