100 Days Python Challenge

🚀 Day 4 of #100DaysOfCode in Python! 🐍

Today's mission: Embrace the power of randomization and conquer Python lists! 🎲📋

🎮 Activity: Let's build the classic Rock, Paper, Scissors game! ✌️📄✂️

Challenge: Code your own version, share snippets, and let's play virtually! 🚀💻

Who's up for some coding fun and a game of strategy? 🙌 #Python #CodingChallenge #Day4 #Randomization #RockPaperScissors

Warming up with the Random Head - Tail coin flip

In [3]:

```
# Head or Tail Script

# Hint: Remember to import the random module first. 🎲

#Welcoming notes
print('Welcome to the Head or Tail coin flip')
import random

#Request the player to guess the Head or Tail

i = 0

while i < 5:
    x = input('What is your guess? (H or T)').lower()
    a= random.randint(0,1)
    if a == 0:
        outcome = 't'
        if x == outcome:
            print('Great, the Outcome is Tail')
            break
        else:
            print('Opss, The Outcome is Tail, Try again')
    else:
        outcome = 'h'
        if x == outcome:
            print('Great, the Outcome is Head')
            break
        else:
            print('Opss, The Outcome is Head, Try again')
    i +=1
```

```
Welcome to the Head or Tail coin flip
What is your guess? (H or T)t
Opss, The Outcome is Head, Try again
What is your guess? (H or T)h
Opss, The Outcome is Tail, Try again
What is your guess? (H or T)t
Great, the Outcome is Tail
```

Selecting a Random Name from a List to Pay the Bill

In [11]:
```
#Bill payment for group shopping by a random selection from the group

print('Welcome to the Random selection task')

#Get the name of those in the group
Names = input('Enter the Names of individual in the group separated wit
name = Names.split(',')

paid = (random.randint(0, len(name) - 1))
Person = name[paid]
print ('--------------')
#print(len(name))
print(f'The Bill will be paid by {Person}.')
```

```
Welcome to the Random selection task
Enter the Names of individual in the group separated with ",": Weah, B
oakai, Bako, Barry, Hinnel, Soma
--------------
The Bill will be paid by  Boakai.
```

Script to Locate a Position from a Map

In [28]:
```
#Create the List to represent each row

row1 = ['M', 'N', 'P']
row2 = ['W', 'E', 'R']
row3 = ['A', 'S', 'D']

row = [row1, row2, row3]

print(f'{row1}\n{row2}\n{row3}')

a = list(input('What is the Location of the Treasure? (A9 format) '))
x = a[0].lower()
y = int(a[1]) - 1
if x == 'a':
    d = 0
elif x == 'b':
    d = 1
else:
    d = 2

print(row[d][y])
```

```
['M', 'N', 'P']
['W', 'E', 'R']
['A', 'S', 'D']
What is the Location of the Treasure? (A9 format) b3
R
```

In [32]:

```
line1 = ["⬜","⬜","⬜"]
line2 = ["⬜","⬜","⬜"]
line3 = ["⬜","⬜","⬜"]
map = [line1, line2, line3]
print("Hiding your treasure! X marks the spot.")
position = input() # Where do you want to put the treasure?
# 🚨 Don't change the code above 👆
# Write your code below this row 👇


# Write your code above this row 👆
# 🚨 Don't change the code below 👇

position=list(position)
x = position[0].lower()
y = int(position[1]) - 1

if y == 0:
  d = line1
elif y == 1:
  d = line2
else:
  d = line3

if x == 'a':
  e = 0
elif x == 'b':
  e = 1
else:
  e = 2
d[e] = 'X'

if y == 0:
  line1 = d
elif y == 1:
  line2 = d
else:
  line3 = d
print(f"{line1}\n{line2}\n{line3}")
```

```
Hiding your treasure! X marks the spot.
c2
['⬜', '⬜', '⬜']
['⬜', '⬜', 'X']
['⬜', '⬜', '⬜']
```

In [30]:

```
line1 = ["⬜","⬜","⬜"]
line2 = ["⬜","⬜","⬜"]
line3 = ["⬜","⬜","⬜"]
map = [line1, line2, line3]
print("Hiding your treasure! X marks the spot.")
position = input() # Where do you want to put the treasure?
# 🎉 Don't change the code above 👆
# Write your code below this row 👇
letter = position[0].lower()
abc = ['a', 'b', 'c']
letter_index = abc.index(letter)
number_index = int(position[1]) - 1
map[number_index][letter_index]= 'X'

# Write your code above this row 👆
# 🎉 Don't change the code below 👇
print(f"{line1}\n{line2}\n{line3}")
```

```
Hiding your treasure! X marks the spot.
b3
['⬜', '⬜', '⬜']
['⬜', '⬜', '⬜']
['⬜', 'X', '⬜']
```

The Rock, Paper, Scisors Game with Computer

In [55]:

```
import random

rock = '''
    _______
---'   ____)
      (_____)
      (_____)
      (____)
---.__(___)
'''

paper = '''
    _______
---'   ____)____
          ______)
          _______)
         _______)
---.__________)
'''

scissors = '''
    _______
---'   ____)____
          ______)
       __________)
      (____)
---.__(___)
'''

game_images = [rock, paper, scissors]

user = int(input("What do you choose? Type 0 for Rock, 1 for Paper or 2
if user == 0:
    selection = rock
elif user ==1:
    selection = paper
elif user == 2:
    selection = scissors
else:
    selection = 'Invalid'

computer = game_images[random.randint(0,2)]

print(f'You choose: {selection} .')
print(f'Computer Chooses: {computer}')


if selection == 'Invalid' or user_choice < 0:
    print("You typed an invalid number, you lose!")
elif selection == rock and computer == paper:
    print('You lose')
elif selection == scissors and computer == paper:
    print('You Win')
elif selection == paper and computer == scissors:
    print('You Lose')
elif selection == rock and computer == scissors:
    print('You win')
elif selection == scissors and computer == rock:
    print('You Lose')
elif selection == paper and computer == rock:
    print('You Win')
```

```
else:
    print('Its a Tie (Draw Game)')
```

```
What do you choose? Type 0 for Rock, 1 for Paper or 2 for Scissors.
1
You choose:

    _______
---'   ____)____
          ______)
          _______)
         _______)
---.__________)
 .
Computer Chooses:

    _______
---'   ____)
      (_____)
      (_____)
      (____)
---.__(___)

You Win
```

In [ ]:

In [ ]: