# **FLAMES PYTHON PROJECT**

FLAMES is a popular game, especially among young people, used to predict the relationship between two individuals based on their names. The name "FLAMES" is an acronym that stands for:

- Friends
- Lovers
- Affectionate
- Marriage
- Enemies
- Siblings

Watch the Video below to understand better: https://youtu.be/KUpMjgo4aUM?si=eG9NpYfUsp2VfGbR

# As opposed in the video, our loop will keep calculating till only 1 letter is left in the end.

#### HINT:

- 1. Create functions to perform operations
- 2. Uses String operations
- 3. For loop and while loop to be used

# **ALGORITHM:**

#### Step 1:

- 1. Create a function (1) to take the two names as input.
  - $\rightarrow$  (JAYA and JAYESH)

**HINT:** Lower the case and remove all spaces from the name

- 2. Within the function, create a variable 'flames' to store the string 'FLAMES'
- 3. Using nested FOR Loop, check if there are any common characters in the name.
  - $\rightarrow$  (JAY is common)

**HINT:** You can use lists to store characters of the strings separately and check

- 4. If YES, then eliminate those characters
  - $\rightarrow$  (A and ESH left)
- 5. After eliminating, count the combined number of characters

A+FSH=4

**HINT:** Can count the number of elements of the list

6. Use the WHILE Loop to eliminate characters from the **combined list** until all common characters are eliminated

## <u>HINT:</u>

while true:

This loop calls a function that keeps eliminating common character

### Step 2:

Create another function to <u>interpret the results from previous function</u> and print the following output:

"Jaya and Jayesh are Enemies"

#### HINT:

- 1. Define what each letter stands for in the word 'FLAMES' as given in the description above.
- 2. Create a while loop that keeps looping according to the game rule until only one character remains from the word 'FLAMES'
  - → while len(result)>1
  - → M will be eliminated in first round
  - → Starting from E, L will be eliminated in second round
  - $\rightarrow$  Starting from A, F will be eliminated in third round
  - $\rightarrow$  Starting from A, A will be eliminated in fourth round
  - → Starting from E, S will be eliminated in fifth round
  - $\rightarrow$  E is left at the end (Enemies)

## Step 3:

Create a final main() function which interacts with the user, asking for two names, calculates the FLAMES result using the <u>first function</u>, interprets the result using the <u>second function</u>, and finally <u>prints the relationship</u> <u>prediction</u>.

**HINT**: use the following code at the beginning of the main function which defines the flow of the program

This block ensures that the main function is executed when the script is run directly.