ASSIGNMENT 2

In this assignment you are going to implement a function that takes a number with at least two digits and splits its digits into two parts. (**60 pts**)

- If number has odd number of digits omit the middle number.
  E.G.

23697
23 97

12
1 2

1597
15 97

2345897
234 897

- Assign the minimum value to a variable **a**, and maximum to **b**.
- Implement a for loop that iterates 10 times.
- **For loop** will perform the formulas below,
  a = 3a +2
  b = 2b +3
- After every single iteration check the values of **a** and **b**, whenever **a** becomes larger than **b,** swap their values.
- Function will return 1 as soon as a and b become equal.
- Otherwise, it will return 2.
- Do not use <math.h>.

- **In the main function(40 pts):**

  - Ask user to enter a number.
  - Continue getting values from the user, using a while loop, stop the loop if the function you have implemented returns 1.
  - Print out the output similar to the example outputs.

Warning:

- Submit only the source file in the format **assignment2_name_surname.c**
- **Be sure the extension of your file is c.** If you do not know how to check the extension please look at the file (“How to run your code?”) on the coadsys.
- **Do not use any library other than stdio.**

Example Output 1

```
Enter a number with at least two digits: 23528734
2352 8734
10 tries were not enough!
Enter a new number: 78235
35 78
10 tries were not enough!
Enter a new number: 1232
12 32
10 tries were not enough!
Enter a new number: 23534
23 34
Congratulations you caught one!!!
```

Example Output 2

```
Enter a new number: 1283
12 83
10 tries were not enough!
Enter a new number: 2340234
234 234
10 tries were not enough!
Enter a new number: 2930523
293 523
10 tries were not enough!
Enter a new number: 235234
234 235
10 tries were not enough!
Enter a new number: 235234
234 235
10 tries were not enough!
Enter a new number: 123
1 3
10 tries were not enough!
Enter a new number: 124
1 4
Congratulations you caught one!!!
```