FCE
Computer Science 2018

de test

For the following exercises use your preferred programming language to solve them. Don't worry about user input (you will receive it as params)

1. Foobar, given a limit number N, count from 1 to N, but print “foo” if N is odd and print “bar” if N is even.

2. Given a limit, print all the odd (par) numbers from 0 up to that limit
   Example: count(4) => 0, 2, 4
   count(5) => 0, 2,4

3. Count how many occurrences of a letter are present in a word.
   Example: foo(“the sentence”, “e”) => 4

4. Given an array of positive ints, return the largest (max)
   Example: max([10 , 3, 2, 20]) => 20

5. Array Replacer, given an int array, a X number and Y replacer, write a function that replaces X with Y and returns the new array.
   Example: replace([1,3,4] , 4 , 42) => [1,3,42]

6. Receive three strings and print the concatenation of them:
   Example: concat(“A” , “B” , “C”) => “ABC”

7. Write a Class “username”, that contains the following Public fields: username, fullname, email, age, password. It can have many constructors.

8. From the previous exercise write a public method changePassword(String newpassword), that will change the user’s current password for the new password.

9. From exercise #7 create a public method printFullName() that will print out pretty the Full Name of the username.

10. Given the following Animal class:

```
Public class Animal {
    public void sleep() {
        System.out.println("Sleeping: Zzzzz");
    }
    public void makeNoise() {
        System.out.println("Noises...");
    }
    public void roam() {
        System.out.println("Roamin' on the plain.");
    }
}
```

Create the following:

- Dog:
    - A Dog class that inherits from Animal
    - override makeNoise to ”Barking: Guau Guau!” or "Barking: woof woof!” whatever your dog really barks like.
- Cat:
    - A Cat class that inherits from Animal
    - Override makeNoise to “Miauing: miau”