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import java.util.Random;
import javax.swing.JOptionPane;

public class Bagels {
    private int secretNumber;
    private int userGuess;
    private int secret1, secret2, secret3;
    private int guess1, guess2, guess3;
    private int guessCount = 1;

    public void playGame(){
        generateSecretNumber();

        do{
            do{
                String playGame = JOptionPane.showInputDialog("Enter a 3
digit number "
                    + " not starting with 0 and repeating no
digits");
                userGuess= Integer.parseInt(playGame);
                parseGuess();
                if (guess1 == 0 || guess1 == guess2 || guess2 == guess3 ||
guess1 == guess3){
                    JOptionPane.showMessageDialog(null, "Please enter
another number" +
                        " the first digit can't be 0 and no digits can
repeat");
                }
                } while(guess1 == 0 || guess1 == guess2 || guess2 == guess3 ||
guess1 == guess3 );
                printHint();
            }while (userGuess != secretNumber);

            System.out.println("It took you " + guessCount+ " guesses");
        }

    private void generateSecretNumber(){
        Random secretNum = new Random();
        secretNumber=secretNum.nextInt();

        do{
            secretNumber = secretNum.nextInt(900);
            secret1 = secretNumber/100;
            secret2 = (secretNumber%100)/10;
            secret3 = (secretNumber % 100) % 10;
        }while ((secret1==secret2)|| (secret2==secret3)||
(secret3==secret1)||secret1==0);
    }
}

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}

private void printHint(){
    String hintMessage = "guess = " + userGuess + ",";
        if (secretNumber==userGuess){
            System.out.println("Winner!");
            return;
        }else{

        }

        if (guess1==secret1){
            hintMessage = hintMessage + "Fermi ";
        }
        if (guess2==secret2){
            hintMessage = hintMessage + "Fermi ";
        }
        if (guess3==secret3){
            hintMessage = hintMessage + "Fermi ";
        }
        if (guess2==secret1||guess2==secret3){
            hintMessage = hintMessage + "Pico ";
        }
        if (guess3==secret1||guess3==secret2){
            hintMessage = hintMessage + "Pico ";
        }
        if (guess1==secret2||guess1==secret3){
            hintMessage = hintMessage + "Pico ";
        }
        else if(guess1!=secret1 && guess1!=secret2 && guess1!=secret3 &&
guess2!=secret1
&& guess2!=secret2 && guess2!=secret3 && guess3!=secret1
&&
        guess3!=secret1 && guess3!=secret2 && guess3!=secret3){
            hintMessage = hintMessage + "Bagels ";
        }
        guessCount++;
        System.out.println(hintMessage);
    }

void parseGuess(){
    guess1=userGuess/100;
    guess2=(userGuess%100)/10;
    guess3=(userGuess%100)%10;

}

}

```