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/*--- hw3.java ---*/
import java.util.*;

public class hw3 {
    //This function takes in the desired company as x, the original mids array
    //the original amount of mids, and the final amount after the search
    //The function will return a mids array with the mids of the desired company
    public static mid[] search(int x, mid[] allMids, int amt, int finalamt)
    {
        mid[] finalMids = new mid[finalamt];
        int entryCount = 0;
        for(int i = 0; i < amt; i++)
        {
            if(allMids[i].company == x)
            {
                finalMids[entryCount] = allMids[i];
                entryCount++;
            }
            else
                continue;
        }
        return finalMids;
    }

    //This function searches for the mids of the desired company but
    //only returns how many there are in that particular company.
    //This returned amount is used in the above search function
    public static int searchAmount(int x, mid[] allMids, int amt)
    {
        int counter = 0;
        for(int i = 0; i < amt; i++)
        {
            if(allMids[i].company == x)
                counter++;
            else
                continue;
        }
        return counter;
    }

    public static void main(String[] args)
    {
        int x;
        System.out.print("How many mids? ");
        Scanner in = new Scanner(System.in);
        x = in.nextInt();

        mid[] Mids = new mid[x];
        for(int i = 0; i < x; i++)
            Mids[i] = mid.createMid();

        System.out.print("What company would you like to print out? ");
        int comp = in.nextInt();
        int finalamt = searchAmount(comp, Mids, x);
        mid[] finalMids = search(comp, Mids, x, finalamt);
        for(int i = 0; i < finalamt; i++)
            mid.printMid(finalMids[i]);
    }
}

/*--- mid.java ---*/
import java.util.*;

public class mid
{
    public String alpha;
    public String firstname;
    public String lastname;

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    public int company;

    public static mid createMid()
    {
        Scanner in = new Scanner(System.in);
        System.out.print("Alpha? ");
        mid n = new mid();
        n.alpha = in.next();
        System.out.print("First name? ");
        n.firstname = in.next();
        System.out.print("Last name? ");
        n.lastname = in.next();
        System.out.print("Company? ");
        n.company = in.nextInt();
        return n;
    }

    public static void printMid(mid x)
    {
        System.out.println(x.alpha + " " + x.lastname + " "
            + x.firstname + " " + x.company);
    }
}

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