I. Create classes:

- ***Person*** containing fields ***name*** and ***surname***
- ***Car*** containing ***brand*** (as an enumeration type) and ***registration number***

Then use HashMap to assign cars to their owners. Using the map, go through the records and list the owners and cars belonging to them. Then list the cars whose ***registration number*** begins with "WA". Make the following *main* method work.

```
public static void main(String[] args) {
    Person smith = new Person("Oliver", "Smith");
    Person jones = new Person("Jack", "Jones");
    Person harry = new Person("Harry", "Williams");
    Person jacob = new Person("Jacob", "Brown");

    Car skoda1 = new Car("WA00001", Car.Brand.SKODA);
    Car skoda2 = new Car("SC36010", Car.Brand.SKODA);
    Car mazda1 = new Car("WA01234", Car.Brand.MAZDA);
    Car mazda2 = new Car("DW01ASD", Car.Brand.MAZDA);
    Car bmw = new Car("WA12690", Car.Brand.BMW);
    Car volvo = new Car("KR60606", Car.Brand.VOLVO);

    /*
    * Oliver Smith -> SKODA WA00001, BMW WA12690
    * Jack Jones -> MAZDA DW01ASD
    * Harry Williams -> VOLVO KR60606, MAZDA WA01234, SKODA SC36010
    * Jacob Brown -> [No cars]
    *
    * Cars whose registration numbers begin with WA:
    * SKODA WA00001
    * BMW WA12690
    * MAZDA WA01234
    * */

    for (/* ... */ : carMap/* ... */) {
        /* ...? */
        System.out.println(/* ... */ + " owns " + /* ... */ );
        // np: Oliver Smith owns 2 cars
    }

    System.out.println(carMap.get(jones).get(0));
    // MAZDA DW01ASD
}
```

II. Write a program that declares a map with the structure:

```
Map<String,List<Person>>
```

Keep information about company names and peoples working in your company.

Input data to the program are represented by a one-dimensional array ***String[] arr***. Each three subsequent elements will represent one data record (the first position is the name of the company, the second is the first name, and the third is the employee's last name). People are represented by objects of the ***Person*** class that are stored in list. In map, the key is an object of type ***String*** representing name of the company, and the value stored under the key is the list of employees working in the company.

The program should be able to:

- display content of the map with the name of both the company and its employees,
- display the name of company with the largest number of employees.

For the following array:

```
String[] arr = {
                    "office A", "John", "Doe",
                    "office B", "John", "Brown",
                    "office C", "Mary", "Jones",
                    "office B", "Adam", "Rust",
                    "office C", "Cindy", "Frost",
                    "office A", "Kate", "Coe",
                    "office A", "Bill", "Brown"
                };
```

the result of the program should be as follows:

```
{office B=[John Brown, Adam Rust],
office C=[Mary Jones, Cindy Frost],
office A=[John Doe, Kate Coe, Bill Brown]}
office A: 3 users
```

III. Write a program that will perform the functions of a simple calculator. To make it not too easy, ***must not*** use the *switch, if, for, while*, or *conditional operators* statement.

Calculations are given as String objects in the form:

```
numberNo1 operation numberNo2
```

The operations that interest us are multiplication, division, addition and subtraction.

Provide the body of the ***Calc*** class and the ***doCalc (String command)*** method so that it returns the result of the calculation as a String variable. If any problems occur during the calculation, return *"Enter the correct arithmetical operation to perform"*.

Sample body of ***Main*** class:

```
public class Main {

    public static void main(String[] args) {
        Calc c = new Calc();
        String result = c.doCalc("2 * 3");
        System.out.println(result);
    }

}
```

Hints:

- Consider actions as classes that implement a certain interface we've created
- Operation and selection of mathematical operations should be performed using a map