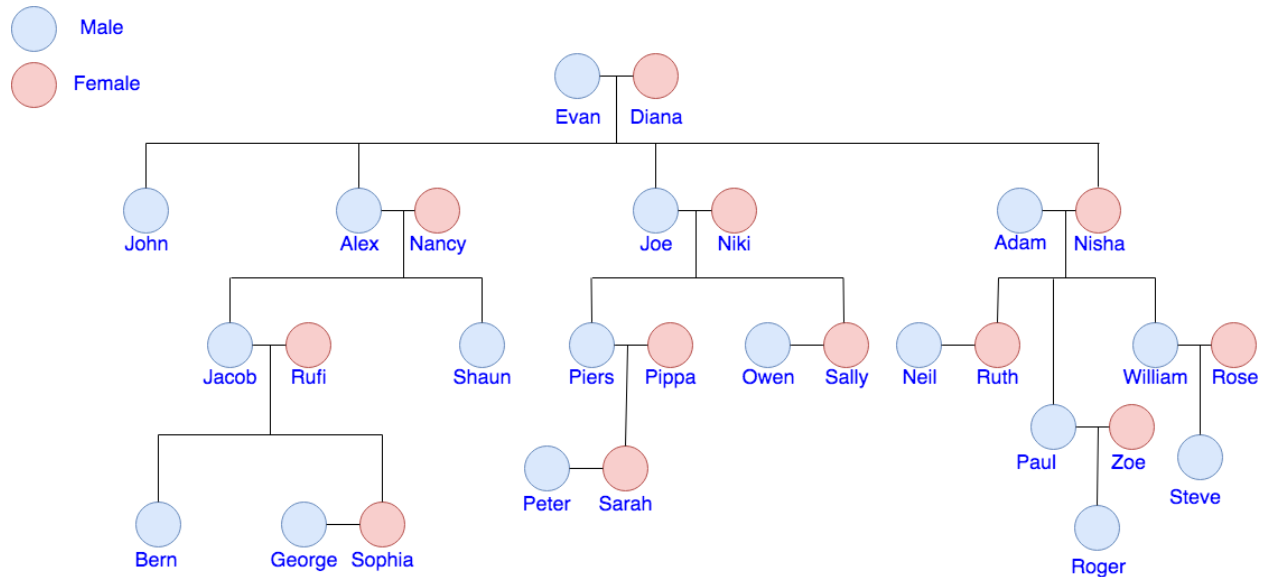


Developer Assignment - Family And Relations

Going through the old stuff in his attic, Indiana comes across a chart which looks like a family tree of multiple generations which shows his ancestors.



Excited by the discovery, he decides to digitise the family tree and utilise it to identify relationships of a person with another on the family tree. Indiana has approached you to help him write a **command-line application** to convert the family tree into some digital format.

Model the family tree such that:

- Given an input in a format
Person=Alex Relation=Brothers
Expected Output should be
Brothers=John,Joe

```
$ run_application
Input: Person=Alex Relation=Brothers
Output: Brothers=John,Joe
$
```

List of supported relations:

- father
- mother
- brother(s)
- sister(s)
- son(s)
- daughter(s)
- cousin(s)
- grandmother
- grandfather
- grandson(s)
- granddaughter(s)
- aunt(s)
- uncle(s)

Indiana notices that no two family members have the same name. Indiana also realises that the information on the chart is a bit outdated. He also need to add more information on the chart so that the information is up to date.

- Given an input in a format

Husband=Bern Wife=Julia

The application should add Julia as a spouse for Bern.

Person=Bern Relation=Wife

Should return output as:

Wife=Julia

```
$ run_application
Input: Husband=Bern Wife=Julia
Output: Welcome to the family, Julia!
Input: Person=Bern Relation=Wife
Output: Wife=Julia

$
```

Indiana should also be able to add a child once its born to a mother.

- Input: **Mother=Zoe Son=Boris**
Input: **Person=Paul Relation=Sons**
Output: **Sons=Boris,Roger**

```
$ run_application
Input: Mother=Zoe Son=Boris
Output: Welcome to the family, Boris!
Input: Person=Paul Relation=Sons
Output: Sons=Boris,Roger

$
```

Assumption:

- Names are unique. Any new member added will also have a unique name.

Expectations:

- The code solution should be:
 - **well modelled** and **designed**
 - **simple**
 - **readable**
 - **production quality**
 - **unit tested.**
- The solution should be easily runnable from command line.
- Reasoning and justification for any 3rd party library usage should be provided.
- Mention setup and execution instruction in a README file.
- The candidate should follow the principles and general conventions of his or her programming language of choice. While there is no restriction on language, please do refrain from using esoteric languages.