

Problem Context

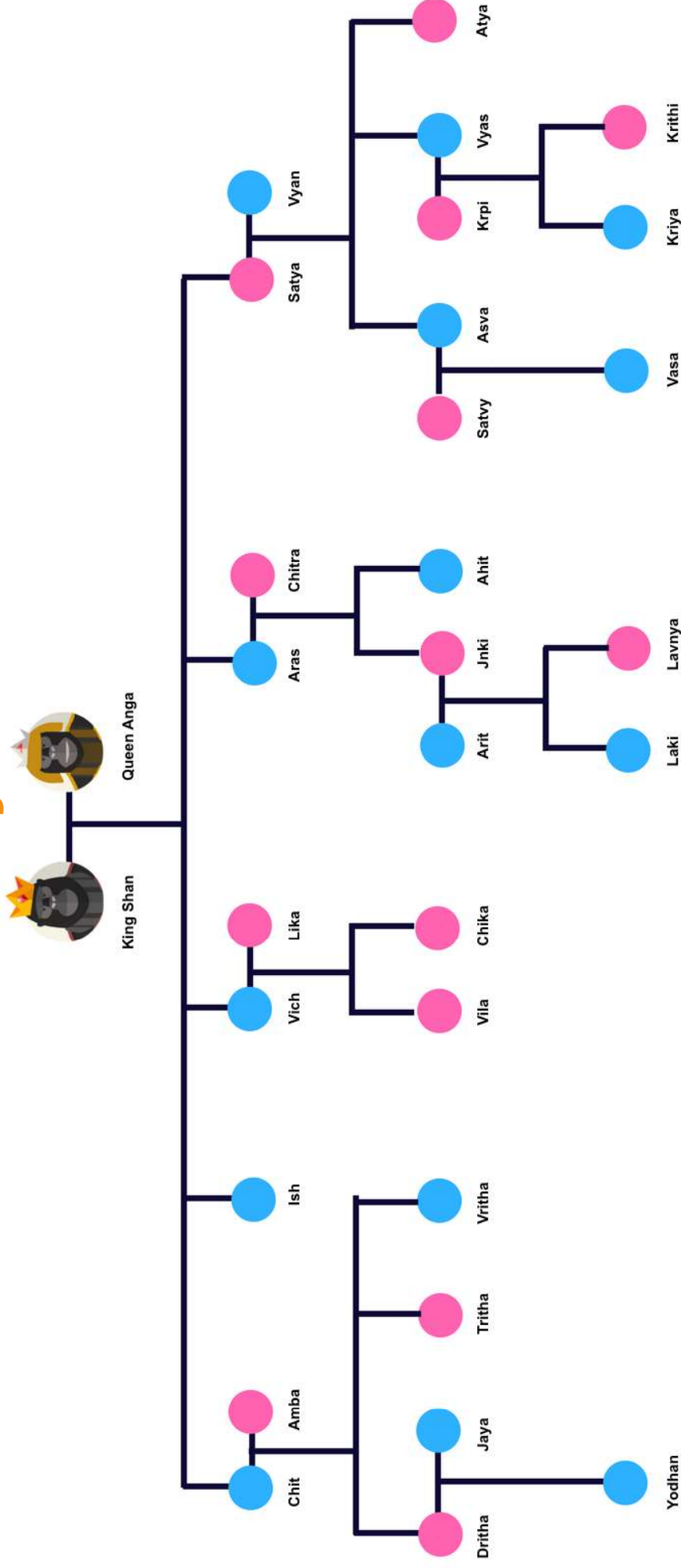
Our story is set in the planet of Lengaburu.....in the distant, distant galaxy of Tara B. And our protagonists are King Shan, Queen Anga & their family.

King Shan is the emperor of Lengaburu and has been ruling the planet for the last 350 years (they have long lives in Lengaburu, you see!). Let's write some code to get to know the family.

This coding problem is for backend and fullstack developers.



Family Tree



The Shan Family Tree

Male Female

Meet The Family

Write code to model out the King Shan family tree so that:

- Given a 'name' and a 'relationship', you should output the people corresponding to the relationship in the order in which they were added to the family tree. Assume the names of the family members are unique.
- You should be able to add a child to any family in the tree through the mother.

Simple, right? But remember.. our evaluation is based not only on getting the right output, but on how you've written your code.

Relationships To Handle

There are many relations that could exist but at a minimum, your code needs to handle these relationships.

Relationships	Paternal-Uncle	Maternal-Uncle	Paternal-Aunt	Maternal-Aunt	Sister-In-Law	Brother-In-Law	Son	Daughter	Siblings
Definition	Father's brothers	Mother's brothers	Father's sisters	Mother's sisters	Spouse's sisters, Wives of siblings	Spouse's brothers, Husbands of siblings			

Sample Input/Output

Do initialise the existing family tree on program start. **Your program should take the location to the test file as parameter.** Input needs to be read from a text file, and output should be printed to the console. The test file will contain only commands to modify or verify the family tree.

↔ Input format to add a child:

```
ADD_CHILD "Mother's-Name" "Child's-Name"  
"Gender"
```

↔ Input format to find the people belonging to a relationship:

```
GET_RELATIONSHIP "Name" "Relationship"
```

↔ Output format on finding the relationship:

```
"Name 1" "Name 2" ... "Name N"
```

↔ Example test file:

```
ADD_CHILD Chitra Aria Female  
GET_RELATIONSHIP Lavnya Maternal-Aunt  
GET_RELATIONSHIP Aria Siblings
```

↔ Output on finding the relationship:

```
CHILD_ADDITION_SUCCEEDED  
Aria  
Jnki Ahit
```

More sample input output scenarios.

Please stick to the Sample input output format as shown. This is very important as we are automating the correctness of the solution to give you a faster evaluation. You can find some sample input output files [here](#).

Sample 1

```
ADD_CHILD Pjali Srutak Male
GET_RELATIONSHIP Pjali Son
```

Output on finding the relationship:

```
PERSON_NOT_FOUND
PERSON_NOT_FOUND
```

Pjali does not exist in the family tree

Sample 2

```
ADD_CHILD Asva Vani Female
GET_RELATIONSHIP Vasa Siblings
```

Output on finding the relationship:

```
CHILD_ADDITION_FAILED
NONE
```

Asva is male, hence child addition failed

Sample 3

```
GET_RELATIONSHIP Atya Sister-In-Law
```

Output on finding the relationship:

```
Satvy Krpi
```