

# My code is my resume

"Geektrust has tie ups with some of the best startups. And all one got to do is write code, the rest is taken care by the geektrust team."

- Athira, now works at [Sahaj Soft](#)

*Athira (ex-Motorola), Souranil (ex-ThoughtWorks) and 200+ developers have solved Geektrust coding challenges to find great jobs over the last 2 years*

- \* **Get feedback** on your coding skills. Detailed, handcrafted feedback on your code.
- \* **Get priority** and be treated as a premium candidate to directly connect with decision makers at companies.
- \* **Get membership** and win an exclusive Geektrust DEVELOPER t-shirt.

Over 2000 developers from the best companies in the world have trusted us with their code. And we don't look just at the output, but how you get it is more important. We care about how well modelled your code is, how readable, extensible, well tested it is. Have questions on the challenges or our evaluation? Ping us on the Geektrust [Slack channel](#).

# Getting started

1. Getting the output right is important, but clean code is more important. You should **absolutely** [read this post](#) on what we look for in your code, and how to get started with the coding challenge.
2. If you are writing code in Java, you have to use either maven or gradle with the respective build files. Please download them from the links below. Edit the build file to set your '{your.qualified.name.of.main.class}' and add your dependencies if any. Ensure the generated executable is named 'geektrust.jar'.
  - [pom.xml](#)
  - [build.gradle](#)
3. Add a readme with how to get your code working, and how to test your code.

# keep in mind

1. We expect a command line app. So no web apps will be considered for evaluation. You don't need data stores either.
2. Usage of non-essential 3rd party libraries will affect your evaluation.
3. If you have questions on the coding challenges, your evaluation, or on companies, you can ping us on our [Slack channel](#) or mail us at [devs@geektrust.in](mailto:devs@geektrust.in) saying "Add to slack".
4. Your solution will be downloaded & seen by companies you're interested in. Hence we advise you to provide a solution that will work on any system without any code changes/manual setup.



# Problem Context

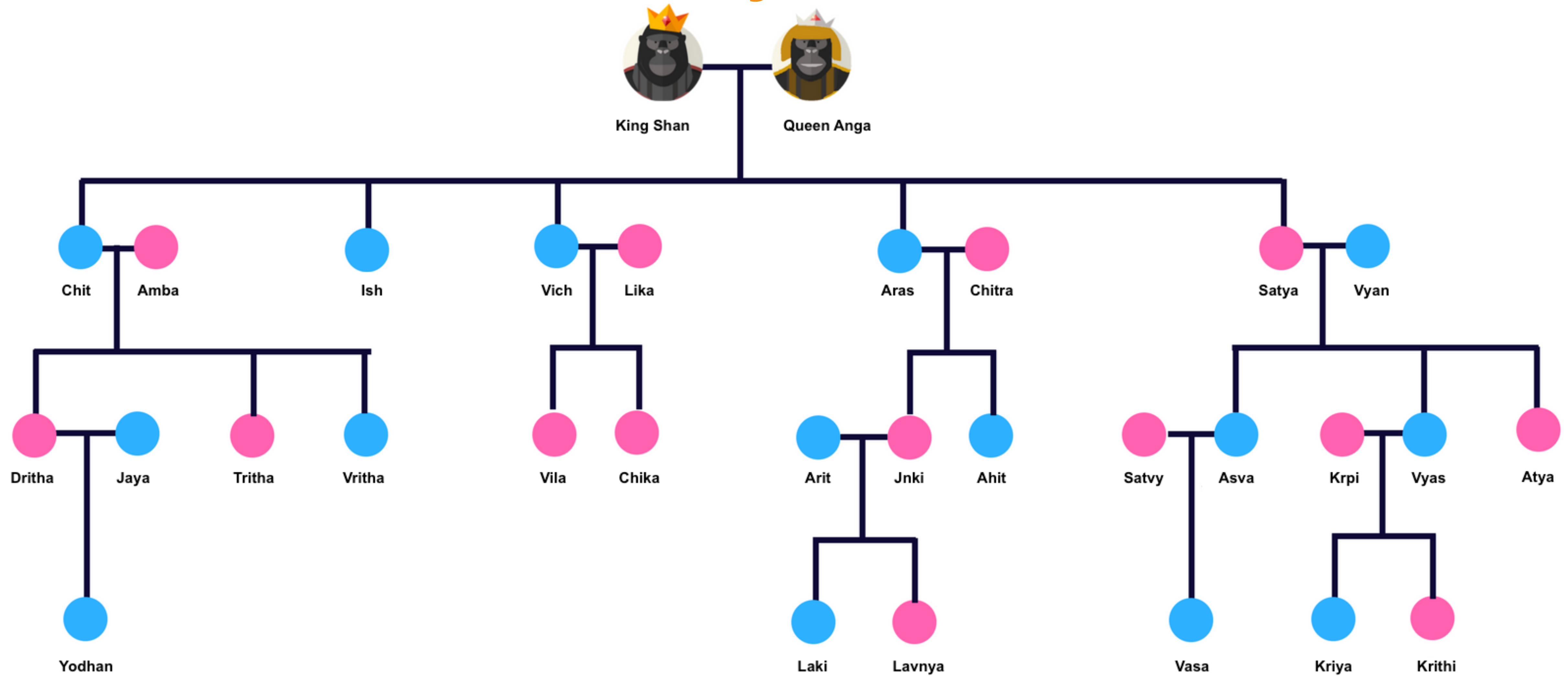
Our story is set in the planet of Lengaburu.....in the distant, distant galaxy of Tara B. And our protagonists are King Shan, Queen Anga & their family.

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 and tests object oriented fundamentals.



# 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.
- 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.

# Sample Input/Output

Input needs to be read from a text file, and output should be printed to the console. **Your program should take the location to the test file as parameter.**

↕ 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:

```
Krpi Satvy
```



# 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			

# check list - submitting code

1. Please compress the file before upload. We accept .zip, .rar, .gz and .gzip
2. Name of the file should be the problem set number you are solving. For e.g. if you have solved Set 1 problem, please name your file 'Set1Problem.zip'.
3. Please upload only source files and do not include any libraries or executables or node\_modules folder.

# what next?

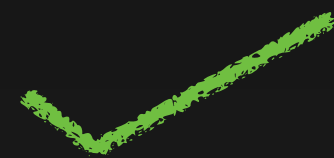
## A few good developers

Write great code. Get membership. Explore jobs.



### Write Code

Sign up to solve interesting coding problems



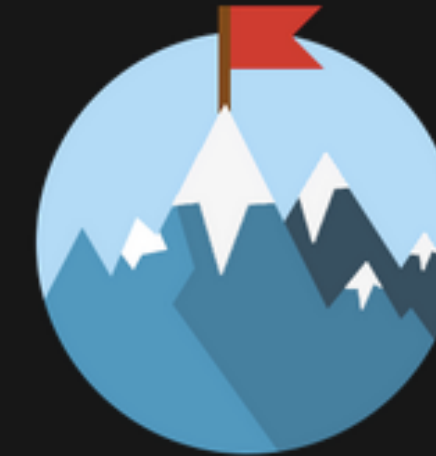
### Be a Member

Clear evaluation and get featured on GeekTrust



### Connect with Companies

Explore opportunities as companies reach out to you



### Find the Perfect Job

Review options, interview & find the right job for you