**UNIVERSITY OF ASIA PACIFIC**

Department of Computer Science & Engineering



**Artificial Inteligence Lab**

**Course Code: CSE 404**

**Assignment -1**

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| --- | --- | --- |
|  |  |  |
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| **Student ID** | : | 18101064 |
| **Section** | : | B1 |
| **Date of Submission** | : | 18.08.2021 |

**Problem Statement:** Develop a program to represent your family tree in Prolog. Also show the below relationships:

* First Cousin
* First Cousin Once Removed
* First Cousin Second Removed
* Second Cousin
* Second Cousin Once Removed
* Second Cousin Twice Removed
* Third Cousin Once Removed
* Third Cousin Twice Removed

**Used Tools :** SWI – Prolog, Microsoft Word

Diagram, engineering drawing

Description automatically generated

Fig: Family Tree

**Output:**

**Male Persons :**

Text

Description automatically generated

**Female Persons:**

Background pattern

Description automatically generated with low confidence

**Father – Son Relation:**

**A picture containing graphical user interface

Description automatically generated**

A picture containing graphical user interface

Description automatically generated

**Mother-Child Relation:**

Table

Description automatically generated with medium confidence

**Siblings:**

**A picture containing text

Description automatically generated**

A picture containing text

Description automatically generated

**Grandparents:**

**Graphical user interface

Description automatically generated with medium confidence**

**Text

Description automatically generated**

**Great-Grandparent:**

**A picture containing graphical user interface

Description automatically generated**

**Great-Great-Grandparent:**

**Graphical user interface, text, application

Description automatically generated**

**First-Cousin:**

**A picture containing graphical user interface

Description automatically generated**

**First Cousin Once Removed:**

**Text

Description automatically generated with medium confidence**

**First Cousin Twice Removed:**

**Table

Description automatically generated with medium confidence**

**Second Cousin:**

**Table

Description automatically generated with low confidence**

**Second Cousin Once Removed:**

**Text, letter

Description automatically generated**

**Second Cousin Twice Removed:**

**Text

Description automatically generated**

**Third Cousin:**

**Text

Description automatically generated**

**Third Cousin Once Removed:**

**Text, letter

Description automatically generated**

**Third Cousin Twice Removed:**

**Text

Description automatically generated with medium confidence**

**Query Checks:**

1. **Parents Check:**

**Diagram

Description automatically generated**

**Graphical user interface, text

Description automatically generated**

1. **First Cousin Check:**

**Diagram

Description automatically generated**

**Text

Description automatically generated with low confidence**

1. **First Cousin Once Removed:**

**A picture containing text, whiteboard, file

Description automatically generated**

**A picture containing logo

Description automatically generated**

1. **First Cousin Twice Removed:**

**A picture containing text, whiteboard

Description automatically generated**

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1. **Second Cousin:**

**A picture containing text, whiteboard

Description automatically generated**

**A picture containing logo

Description automatically generated**

1. **Second Cousin Once Removed:**

**A picture containing text, whiteboard

Description automatically generated**

****

1. **Second Cousin Twice Removed:**

**A picture containing text, whiteboard

Description automatically generated**

****

1. **Third Cousin:**

**Diagram

Description automatically generated**

****

1. **Third Cousin Once Removed:**

**A picture containing text, whiteboard, file

Description automatically generated**

****

1. **Third Cousin Twice Removed:**

**A picture containing text, whiteboard

Description automatically generated**

**A picture containing graphical user interface

Description automatically generated**

**Conclusion:**

For Solve this problem I used some resource from Internet and Read about some problem and solution in Stack overflow.