

## Recursive SQL Queries -

1) Find ID of all of the ancestors of the hamster whose ID is 109.

The database states that in Children table ID1 is a parent of ID2. The other parent **may or may not** be partner of ID1. Thus using the information from Partner table to find the other Parent would be wrong. Solely based on info available in the Children's table, ancestors of 109 are -

```
58 • with recursive
59     Ancestor (parent, child) as (select ID1 as parent, ID2 as child from Children
60                                     union
61                                     select Ancestor.parent, Children.ID2 as child from Ancestor, Children
62                                     where Ancestor.child = Children.ID1)
63     select parent from Ancestor where child = 109;
64
```

Result Grid

parent
103
101
113

2) Find ID and name of all of the ancestors of the hamster whose name is Amy.

```
57
58 • with recursive
59     Ancestor (parent, child) as (select ID1 as parent, ID2 as child from Children
60                                     union
61                                     select Ancestor.parent, Children.ID2 as child from Ancestor, Children
62                                     where Ancestor.child = Children.ID1)
63     select ID, Name from Hamster where ID in (select parent from Ancestor
64                                             where child = (select ID from Hamster where Name = 'Amy'));
65
```

Result Grid

ID	Name
103	Trish
101	Jack
113	Solomon