```
# CS111 Starter File -- Ancestry Medical Data
# Kathi Fisler, 2020

include tables
include shared-gdrive("cs111-2020.arr", "1imMXJxpNWFCUaawtzIJzPhbDuaLHtuDX")

ancestors = table: name, birthyear, eyecolor, female-parent, male-parent
  row: "Anna", 1997, "blue", "Susan", "Charlie"
  row: "Susan", 1971, "blue", "Ellen", "Bill"
  row: "Charlie", 1972, "green", "", ""
  row: "Ellen", 1945, "brown", "Laura", "John"
  row: "John", 1922, "brown", "", "Robert"
end

#|
   Sample Questions of interest:
   1. How frequent is each eye color?
   2. How many generations do we have information for?
   3. What's the average age for female parents to give birth?
   4. Is one specific person an ancestor of another specific person?
|#

# ----------------------------------------

fun parents-of(t :: Table, who :: String) -> List<String>:
  doc: "Return list of names of known parents of given name"
  matches = filter-with(t, lam(r): r["name"] == who end)
  if matches.length() > 0:
    person = matches.row-n(0)
    [list: person["female-parent"], person["male-parent"]]
  else:
    raise("No such person " + who)
  end
where:
  parents-of(ancestors, "Anna") is [list: "Susan", "Charlie"]
  parents-of(ancestors, "Kathi") raises "No such person"
end


# ----------------------------------------

fun grandparents-of(t :: Table, who :: String) -> List<String>:
  doc: "Return list of names of known parents of given name"
  ...
end




# ----------------------------------------

fun ancestors-of(t :: Table, who :: String) -> List<String>:
  doc: "Return list of names of known parents of given name"
  ...
end
```