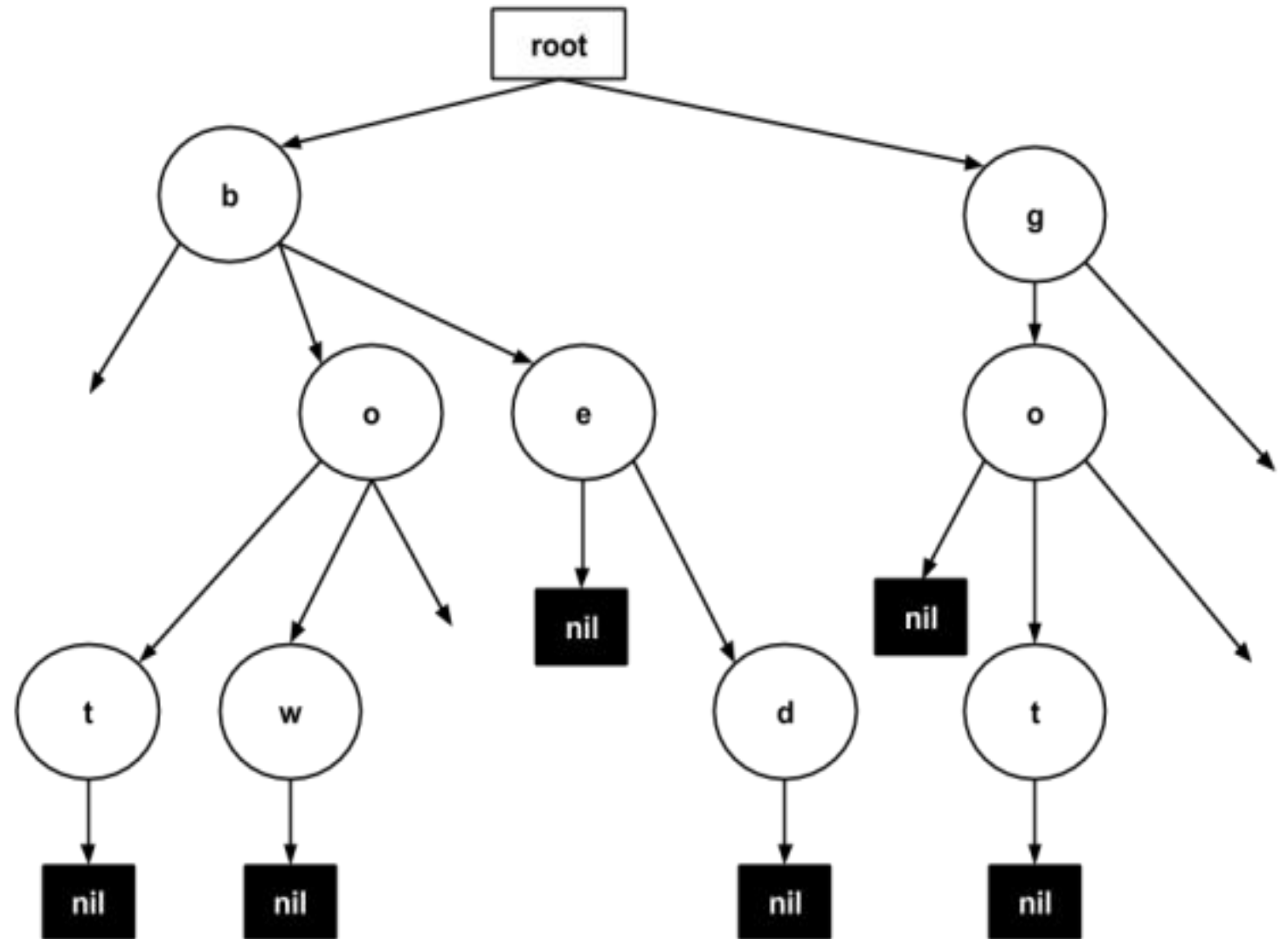
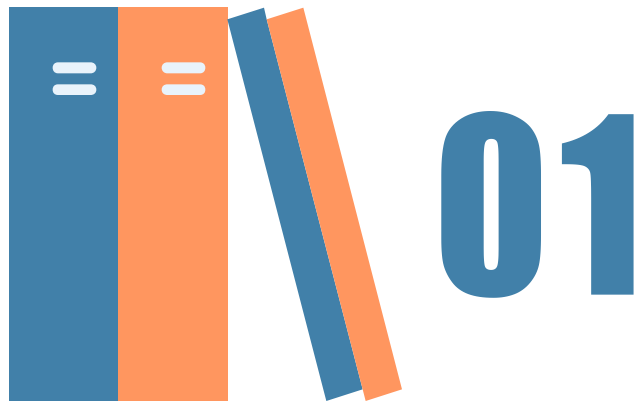


# Prefix Tree

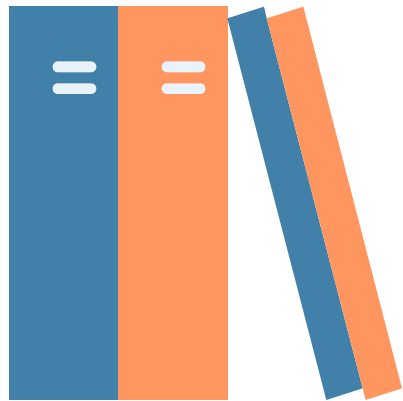




## Definisi

Prefix Tree atau Tries merupakan struktur data pohon yang digunakan untuk menyimpan dan mencari string melalui masing-masing character sebagai kuncinya dan link menuju kunci berikutnya. Dalam Tries, setiap node memiliki banyak child node yang mewakili kemungkinan karakter selanjutnya dalam string.

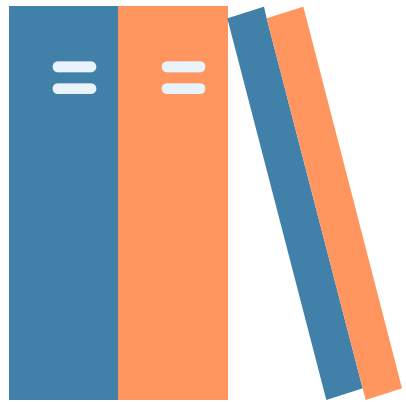
Trie mengikuti aturan dimana jika dua string memiliki awalan yang sama, maka mereka akan memiliki parent node yang sama.



02

## Fungsi

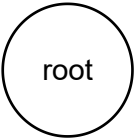
Prefix Tree atau Tries juga bisa digunakan untuk melakukan sorting koleksi string secara alphabetical, mencari apakah string dengan prefix yang diberikan ada dalam Tries atau tidak serta mencari keberadaan string dalam Tries dengan cepat.



**03**

# Visualisasi

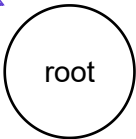
input = { apple, app, bat, ban, april }



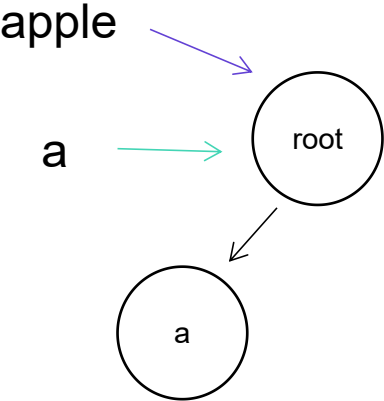
input = { apple, app, bat, ban, april }



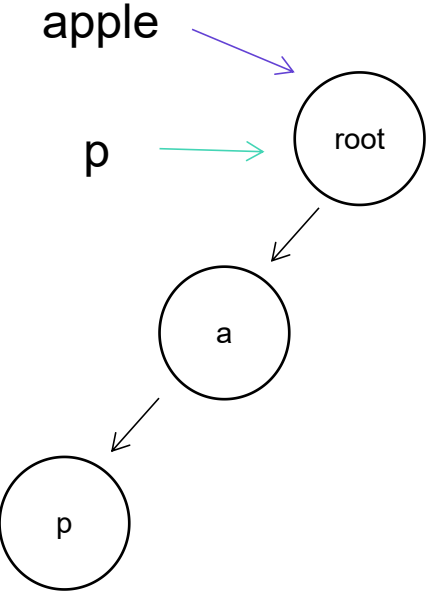
apple



input = { apple, app, bat, ban, april }

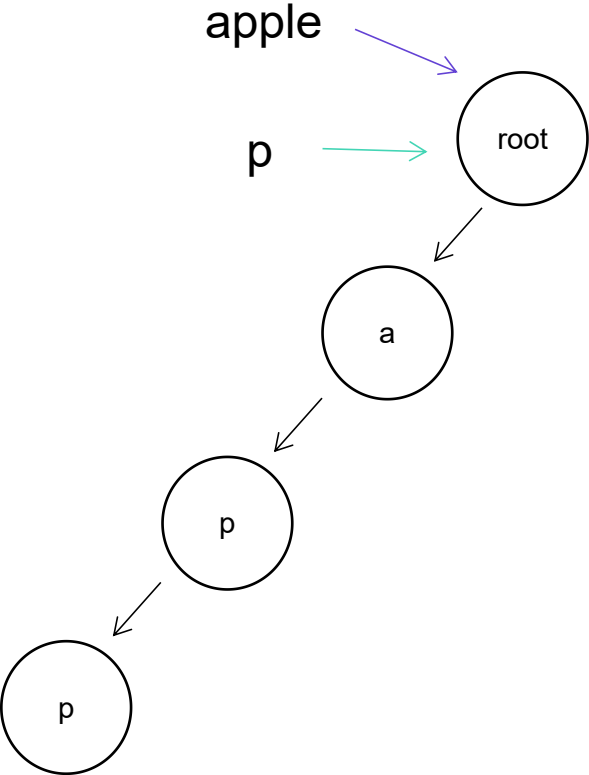


input = { apple, app, bat, ban, april }

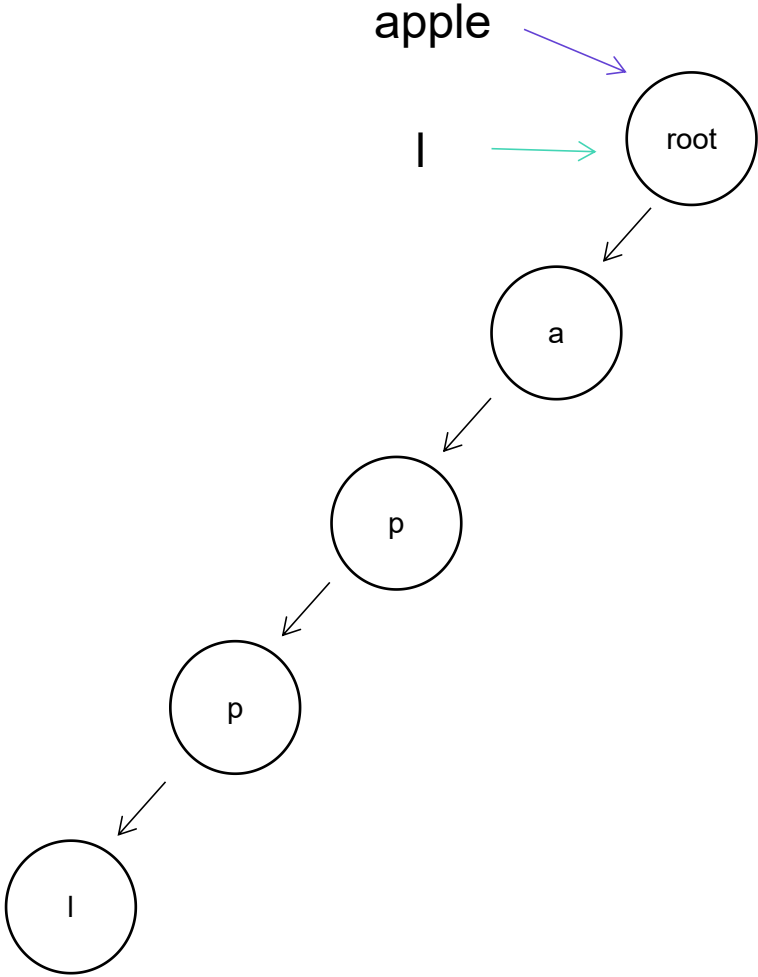




input = { apple, app, bat, ban, april }



input = { apple, app, bat, ban, april }

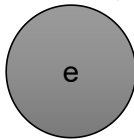
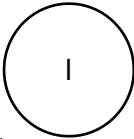
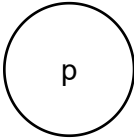
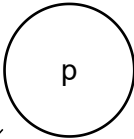
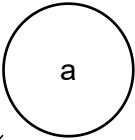
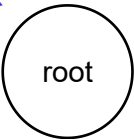


input = { apple, app, bat, ban, april }



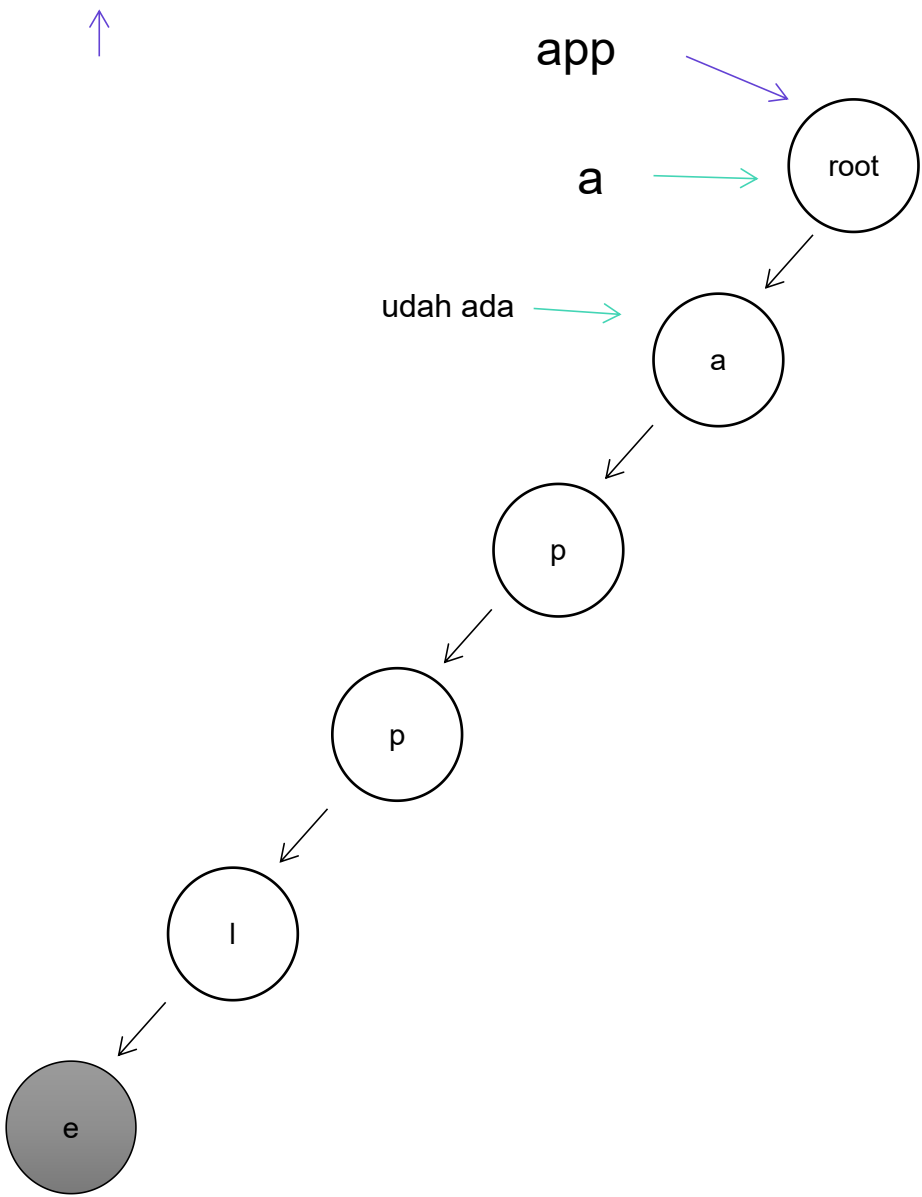
apple

e

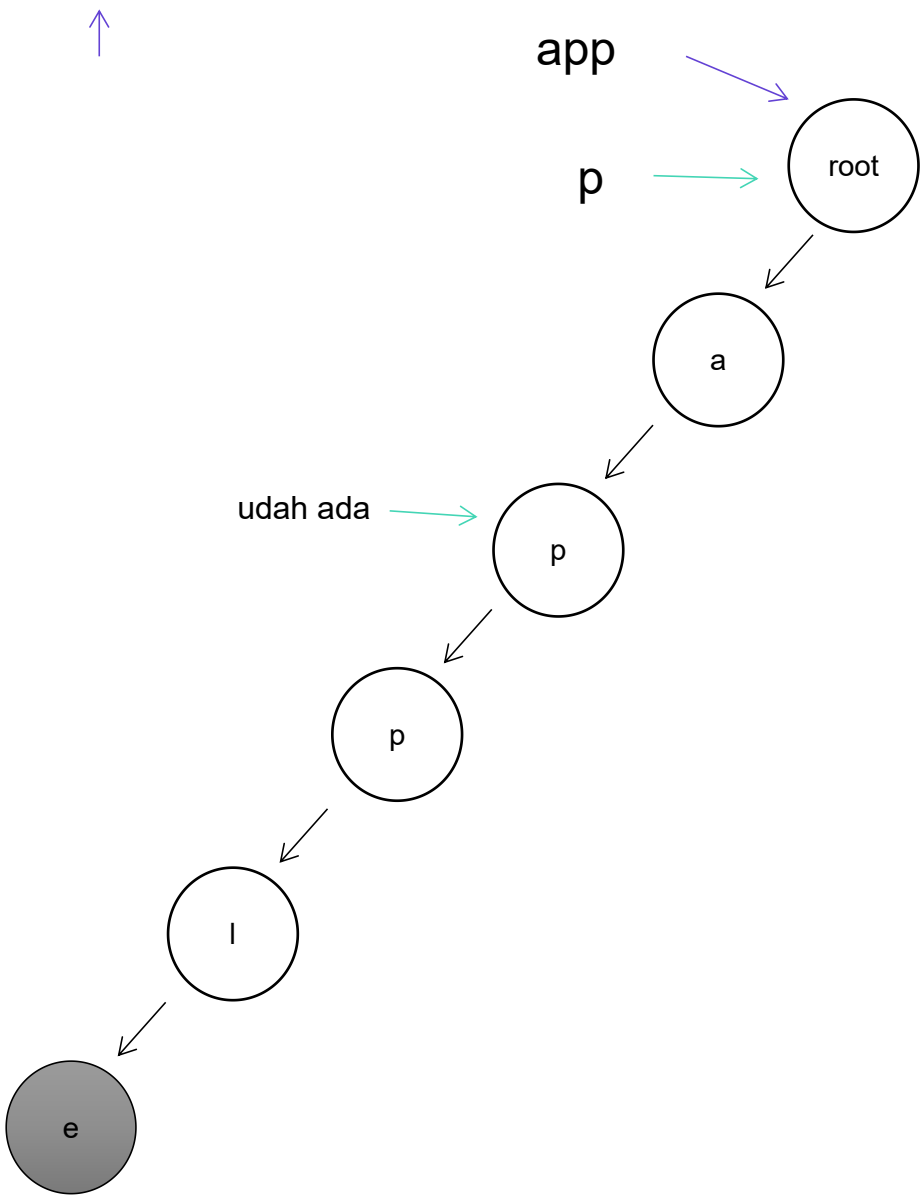


tanda akhir  
dari string

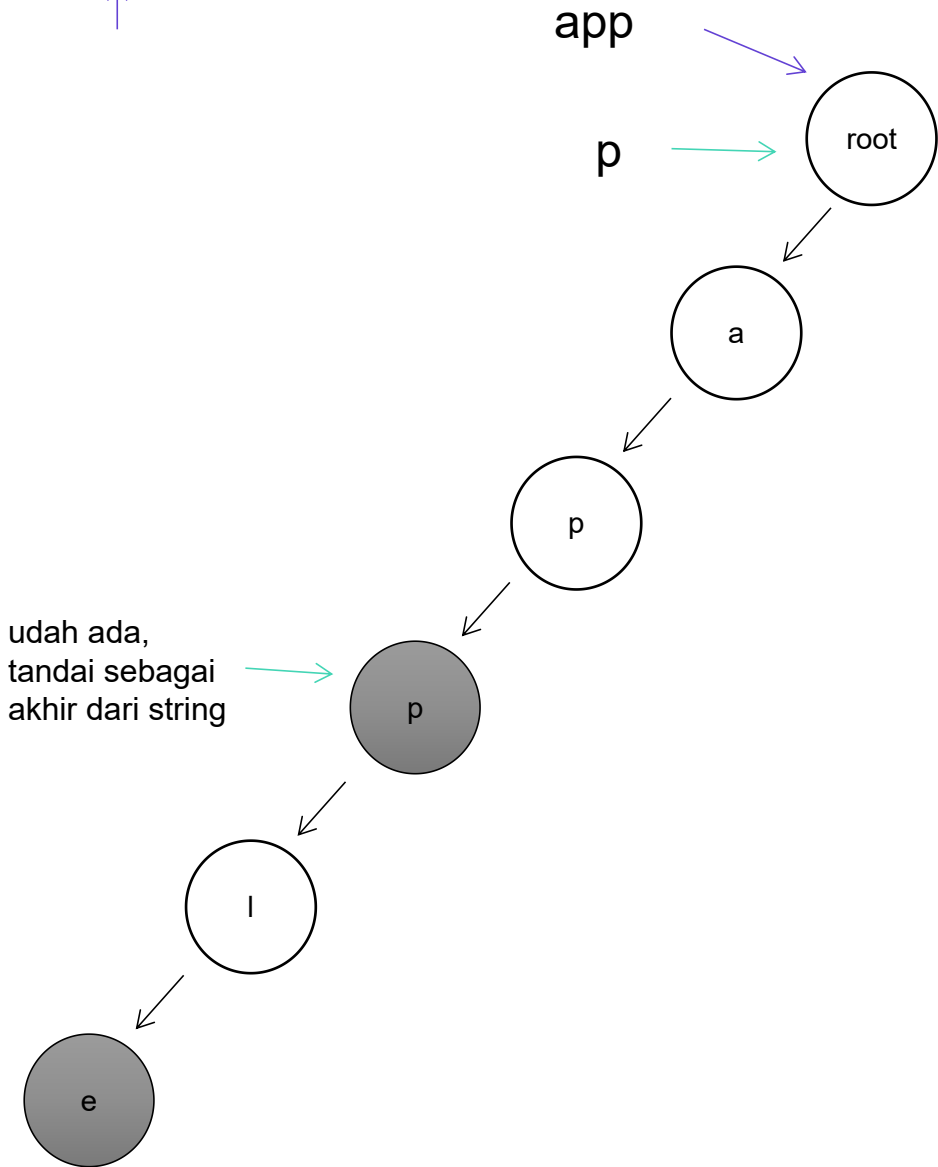
input = { apple, app, bat, ban, april }



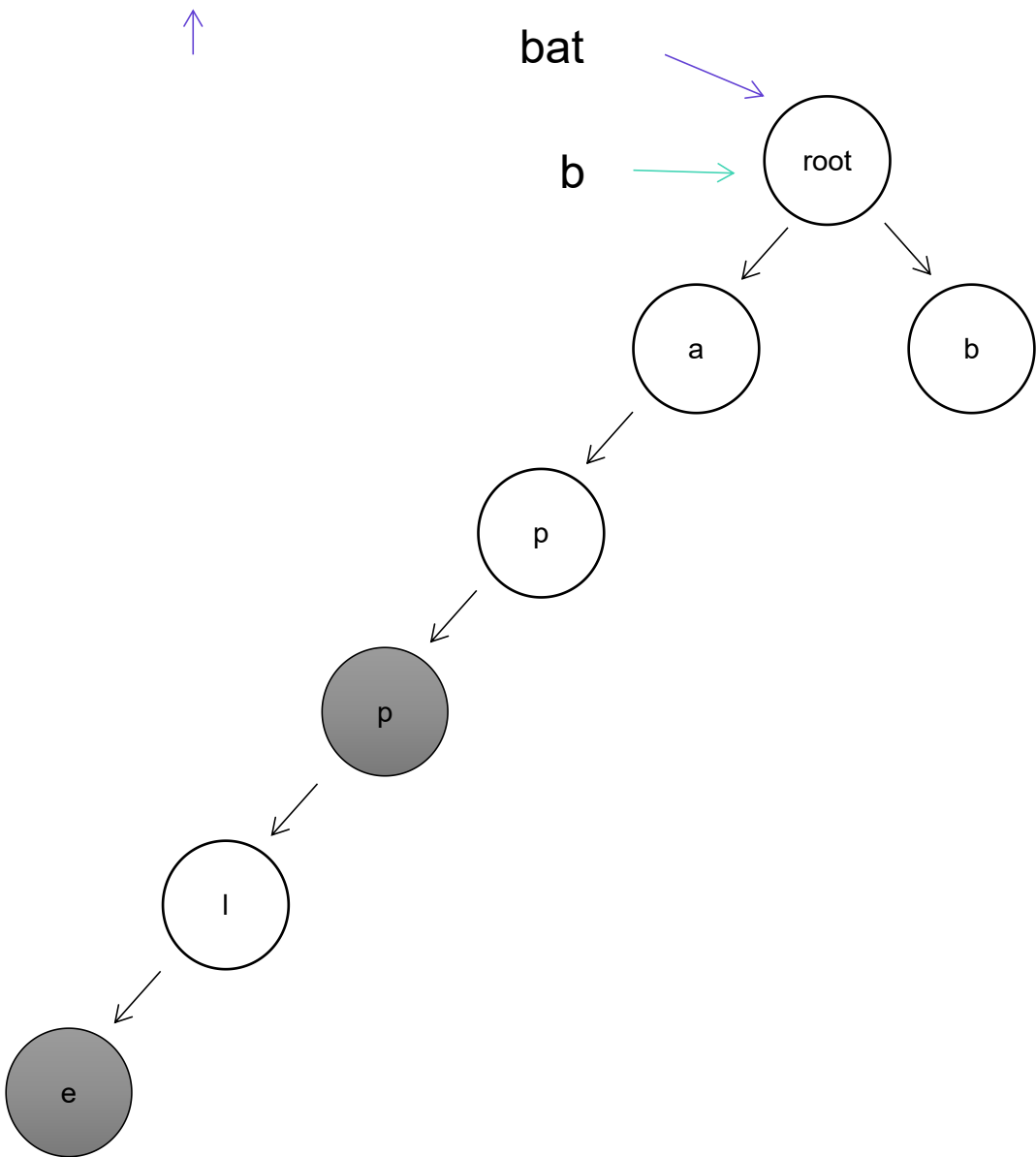
input = { apple, app, bat, ban, april }



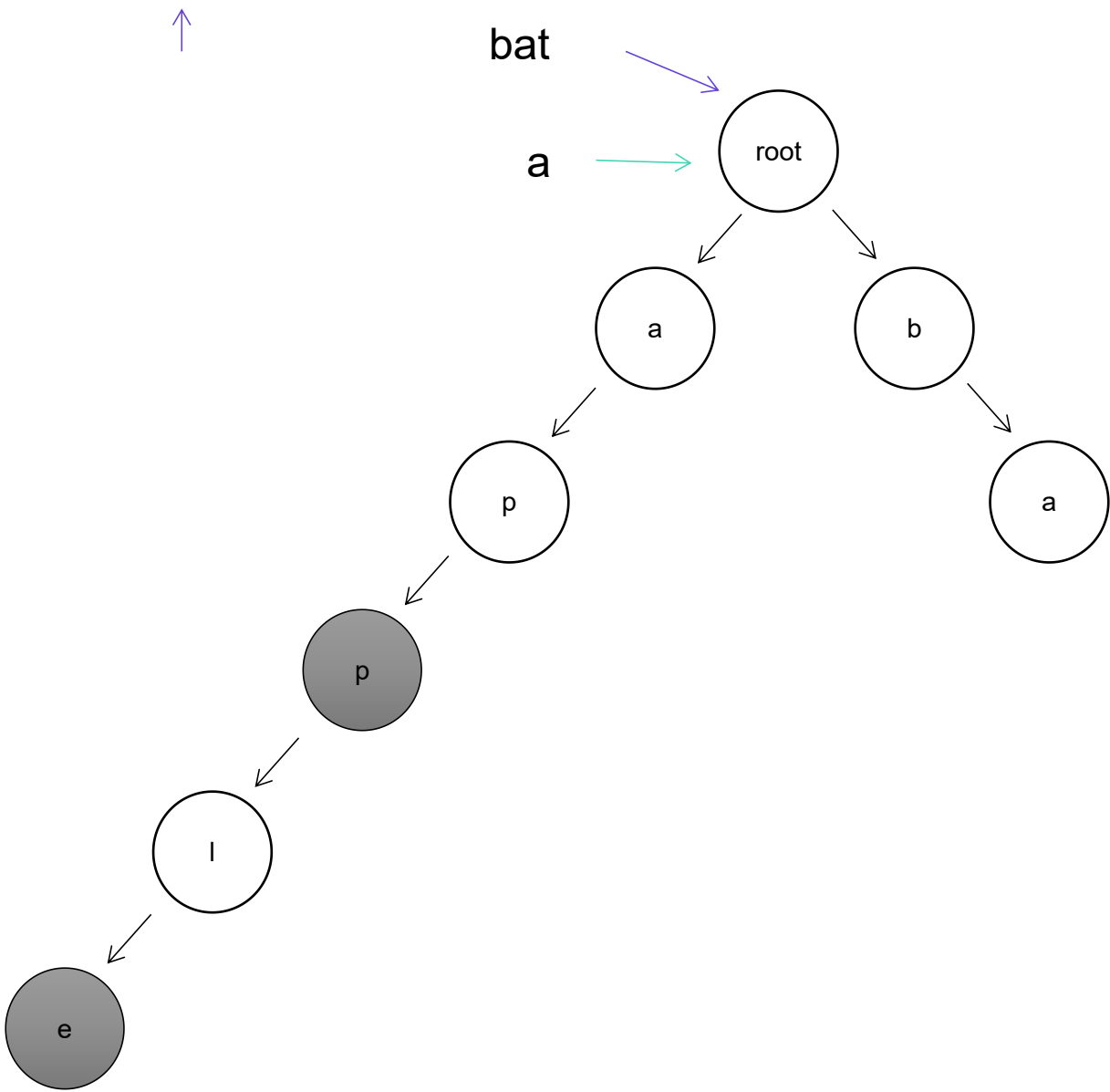
input = { apple, app, bat, ban, april }



input = { apple, app, bat, ban, april }

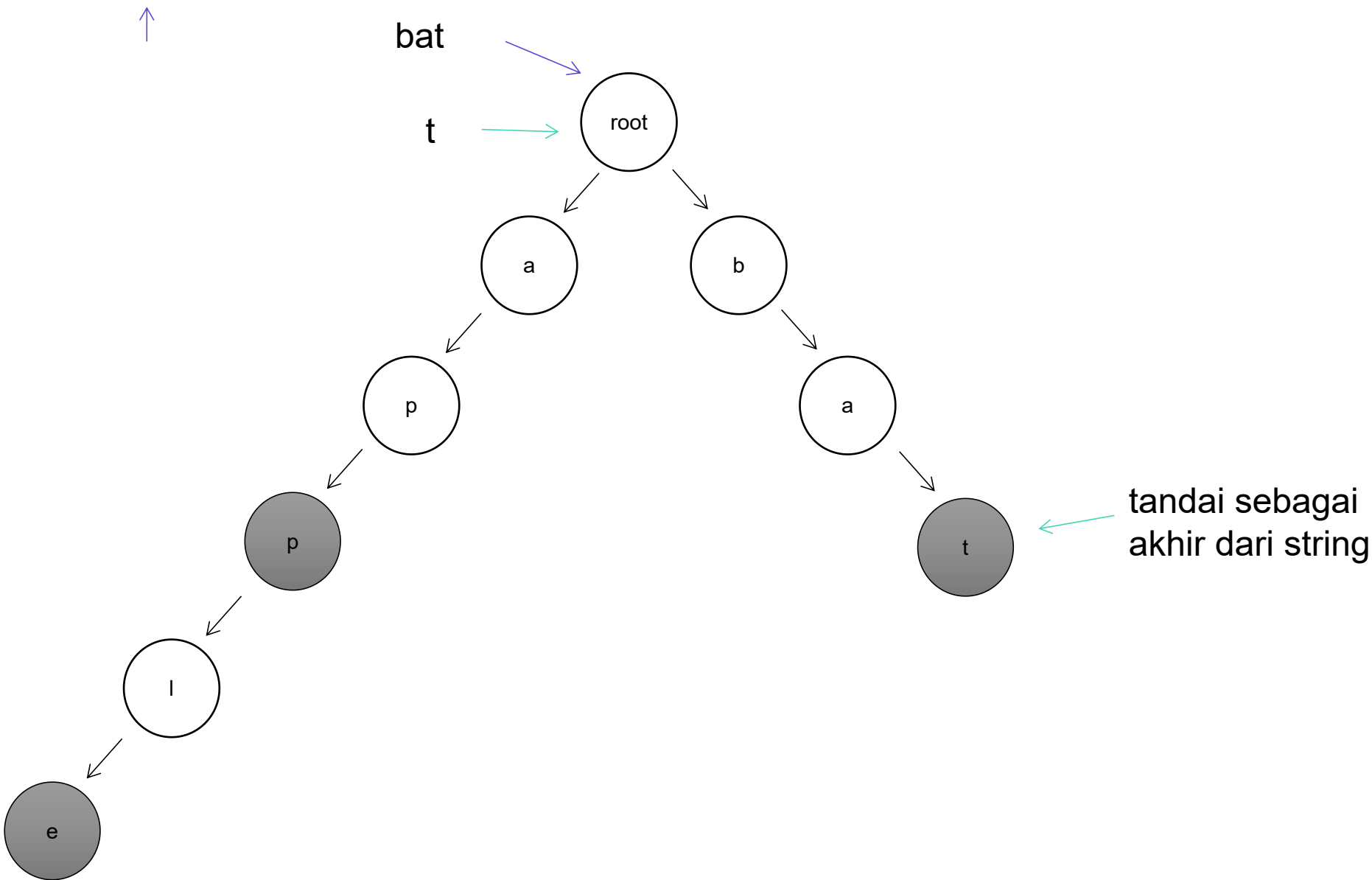


input = { apple, app, bat, ban, april }

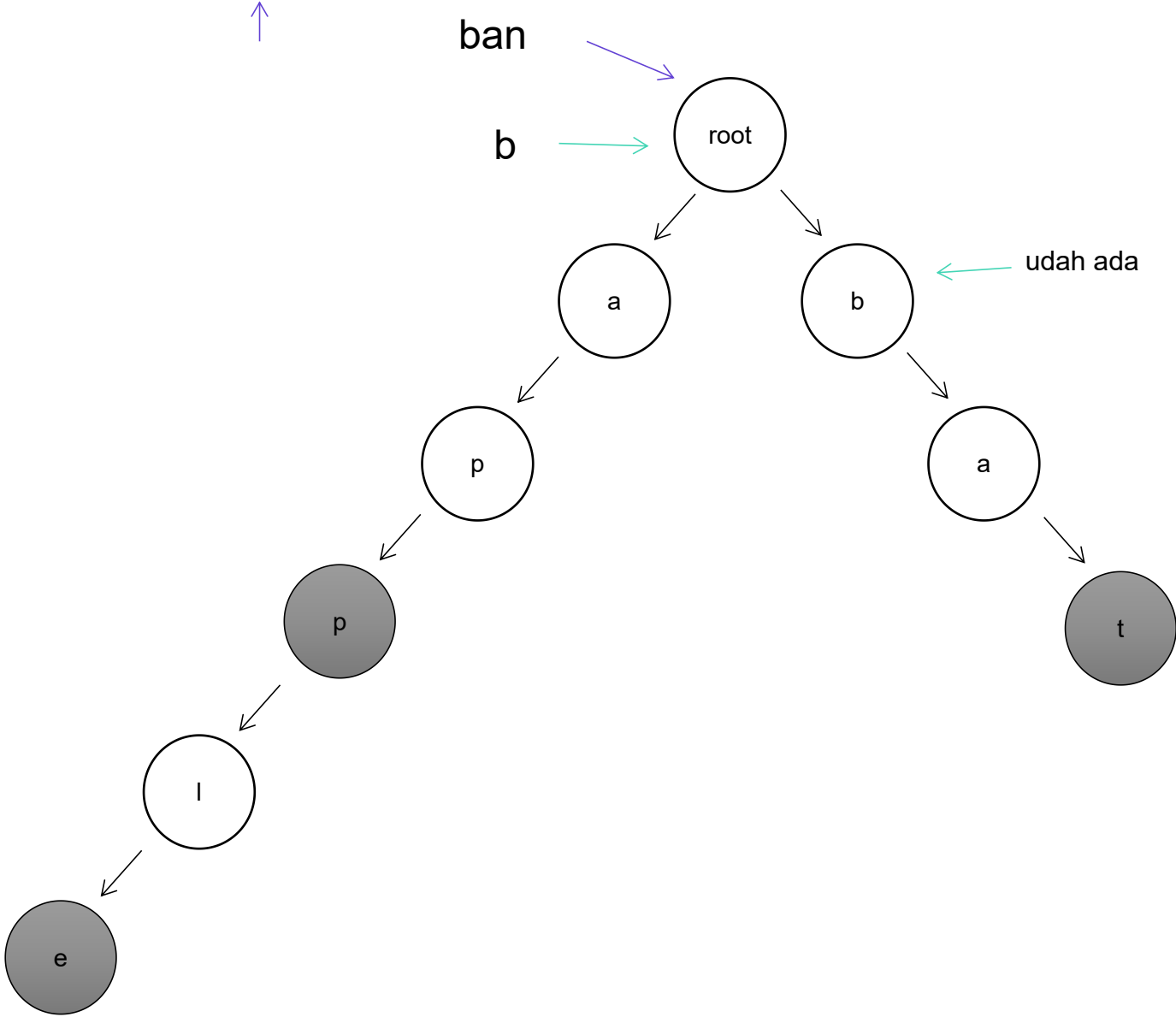




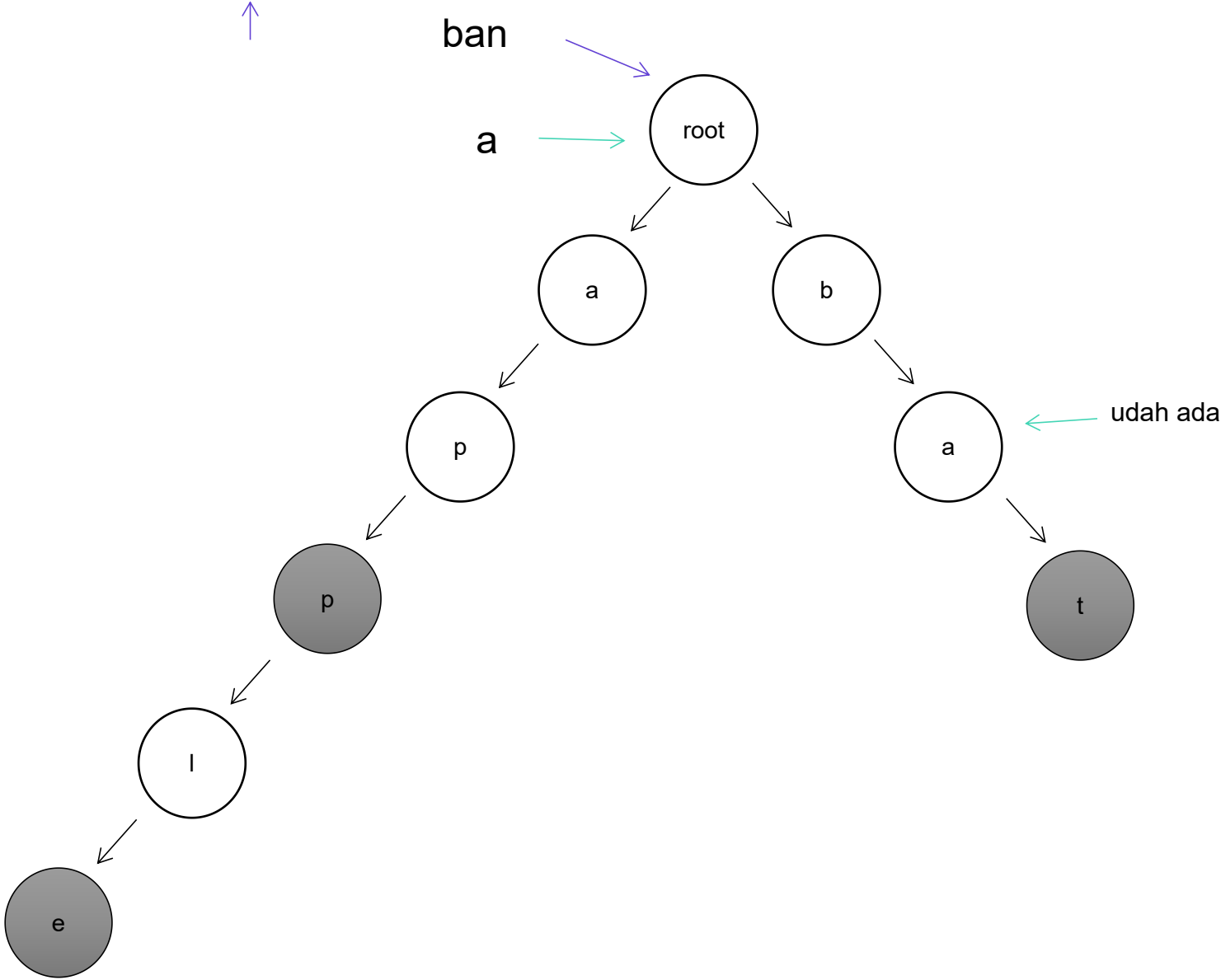
input = { apple, app, bat, ban, april }



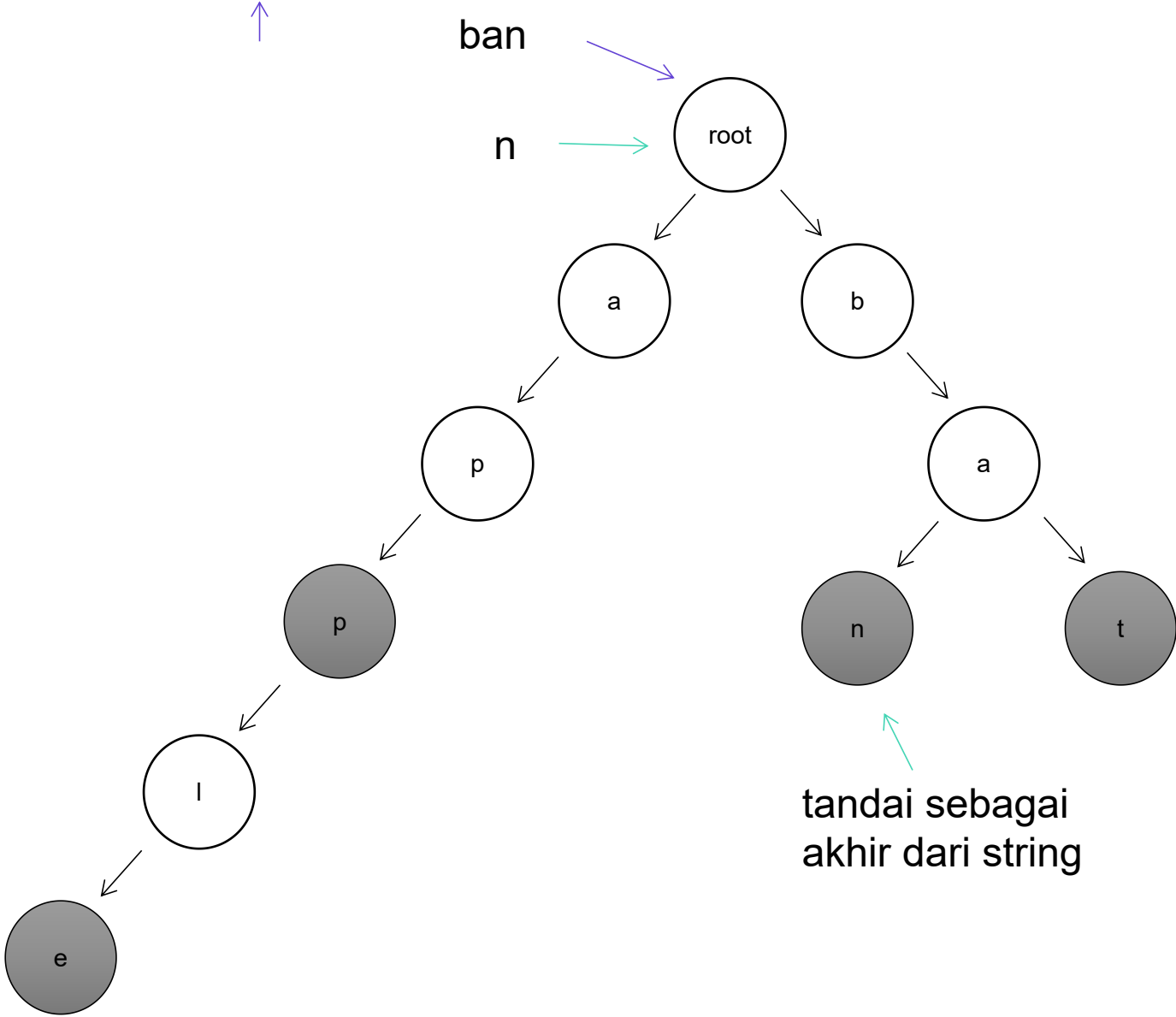
input = { apple, app, bat, ban, april }



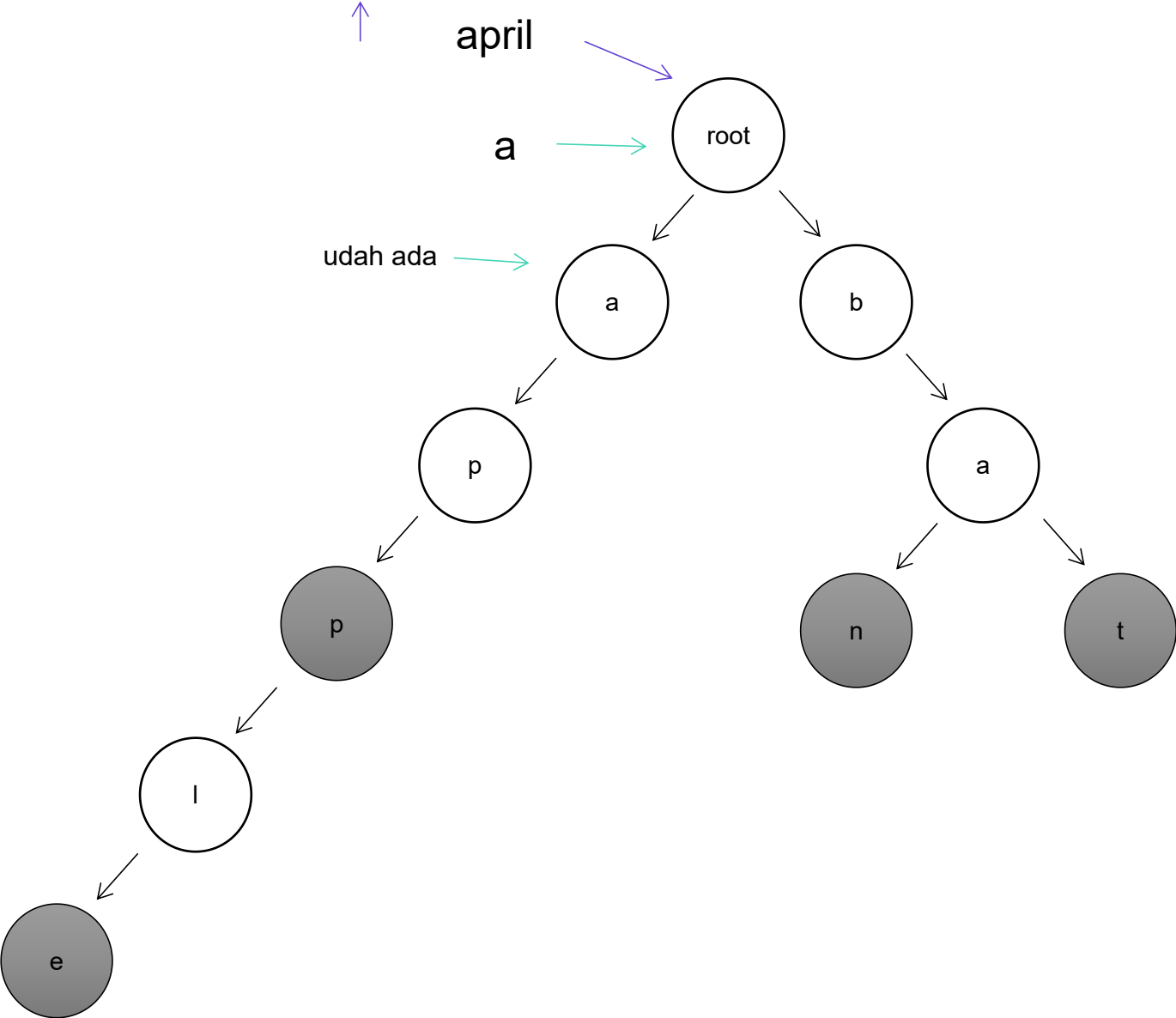
input = { apple, app, bat, ban, april }



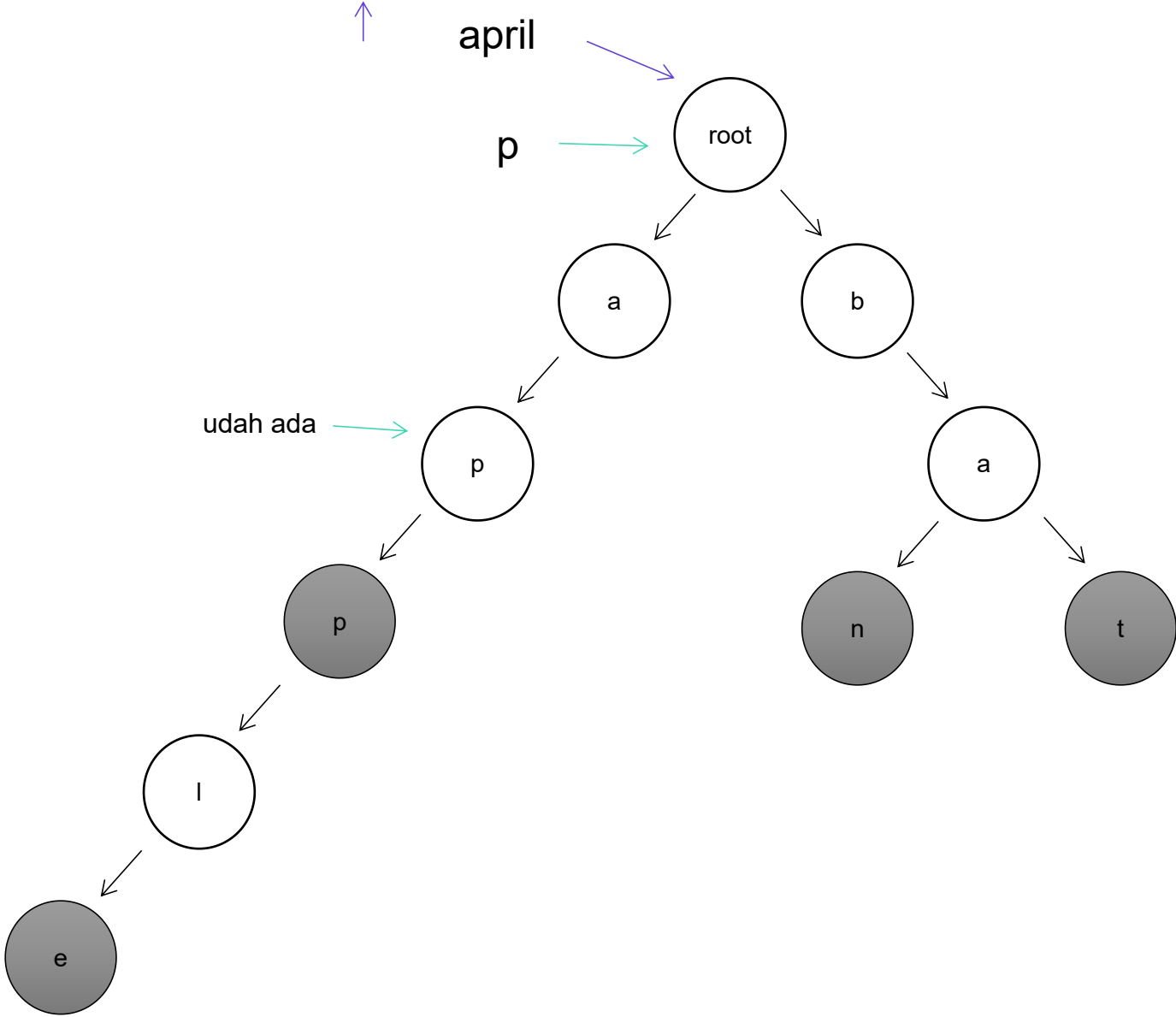
input = { apple, app, bat, ban, april }



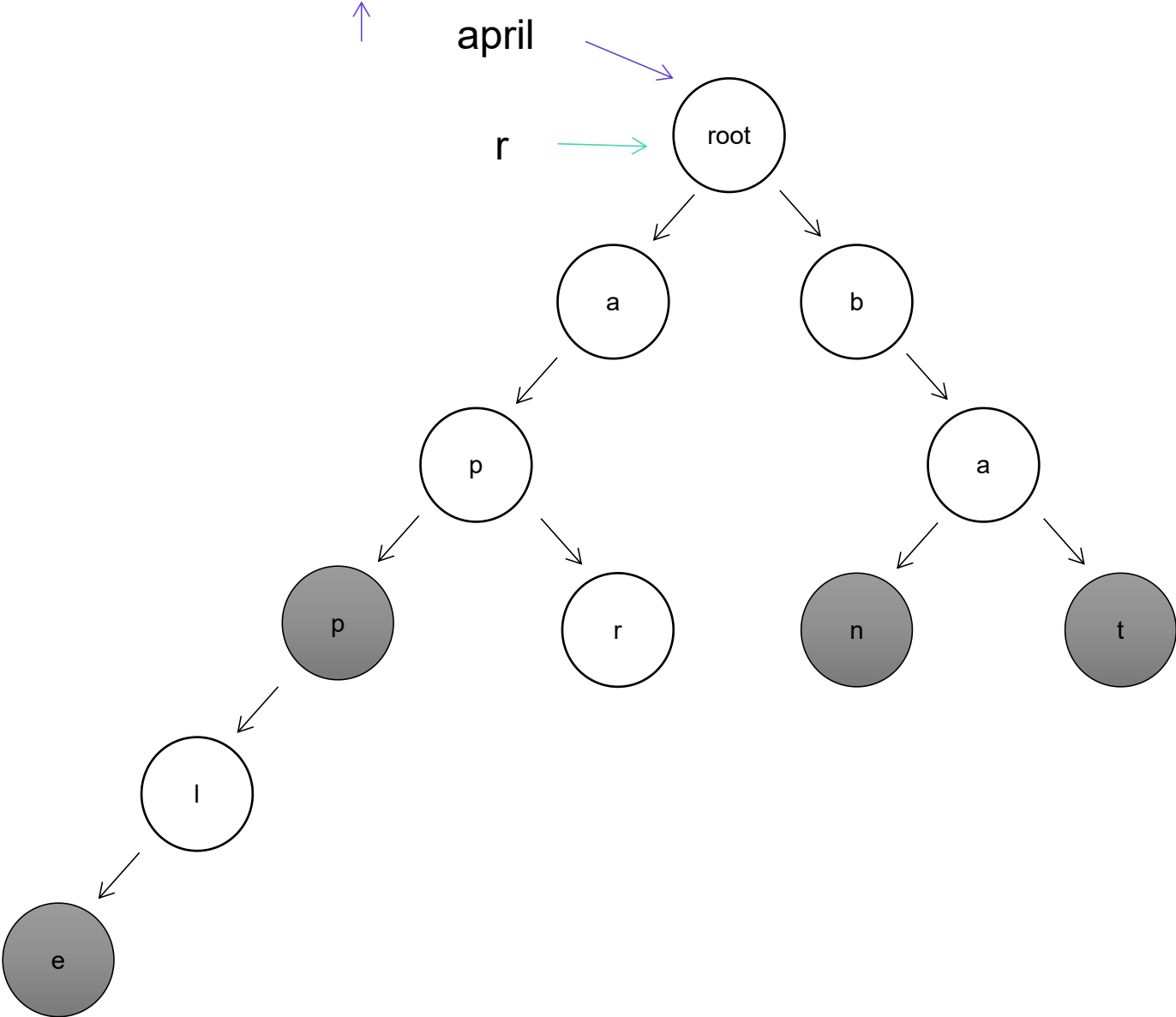
input = { apple, app, bat, ban, april }



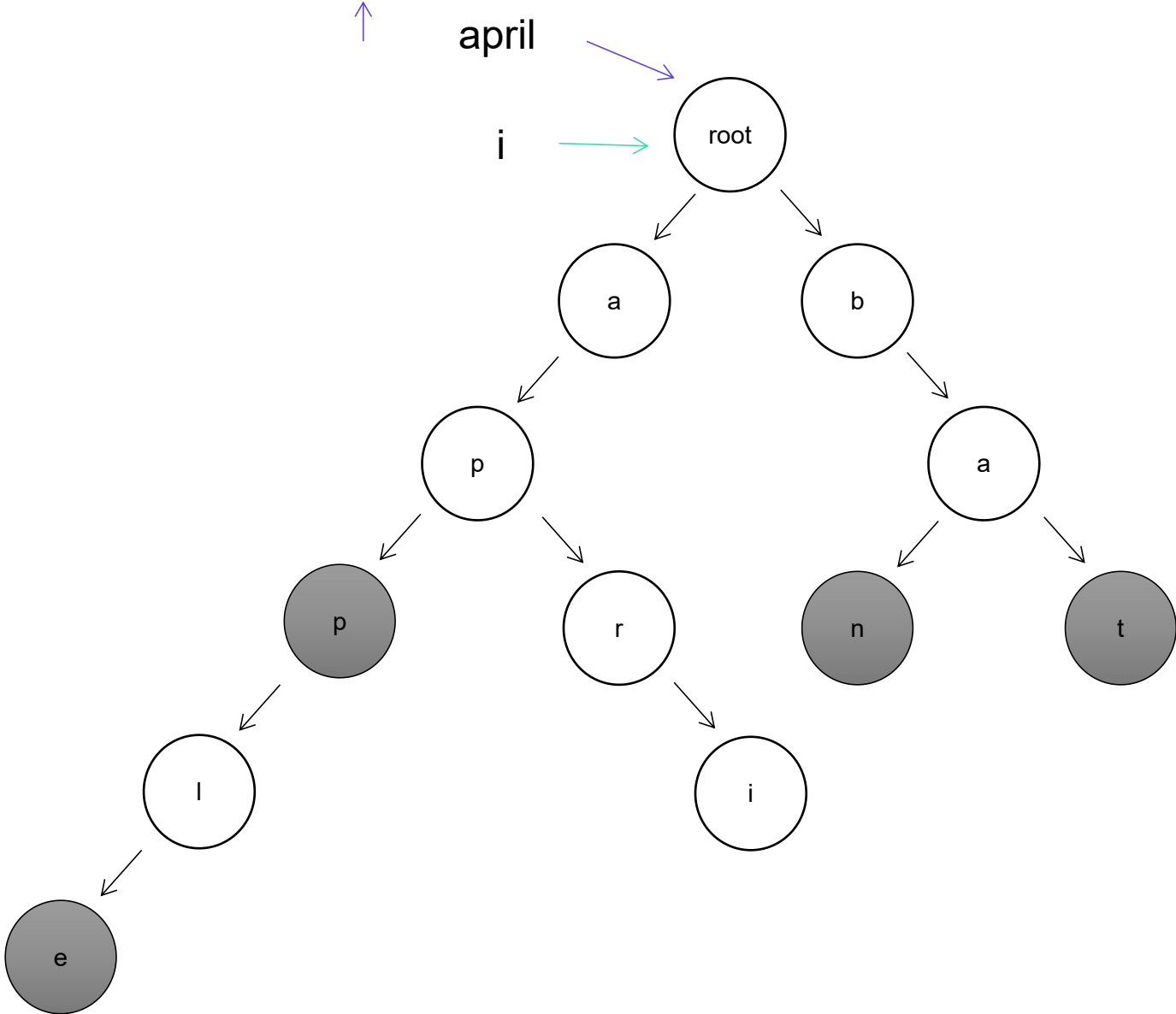
input = { apple, app, bat, ban, april }



input = { apple, app, bat, ban, april }

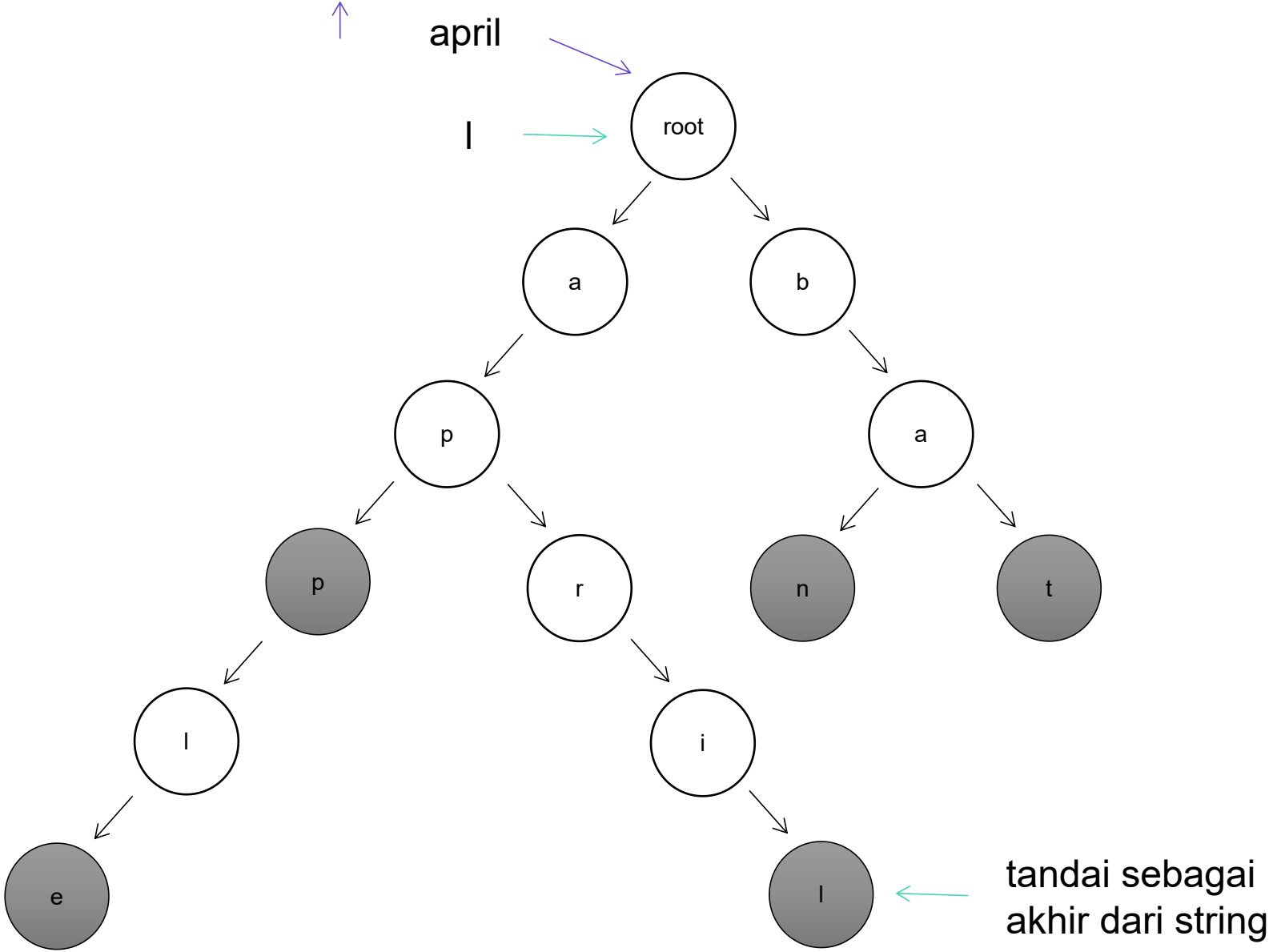


input = { apple, app, bat, ban, april }



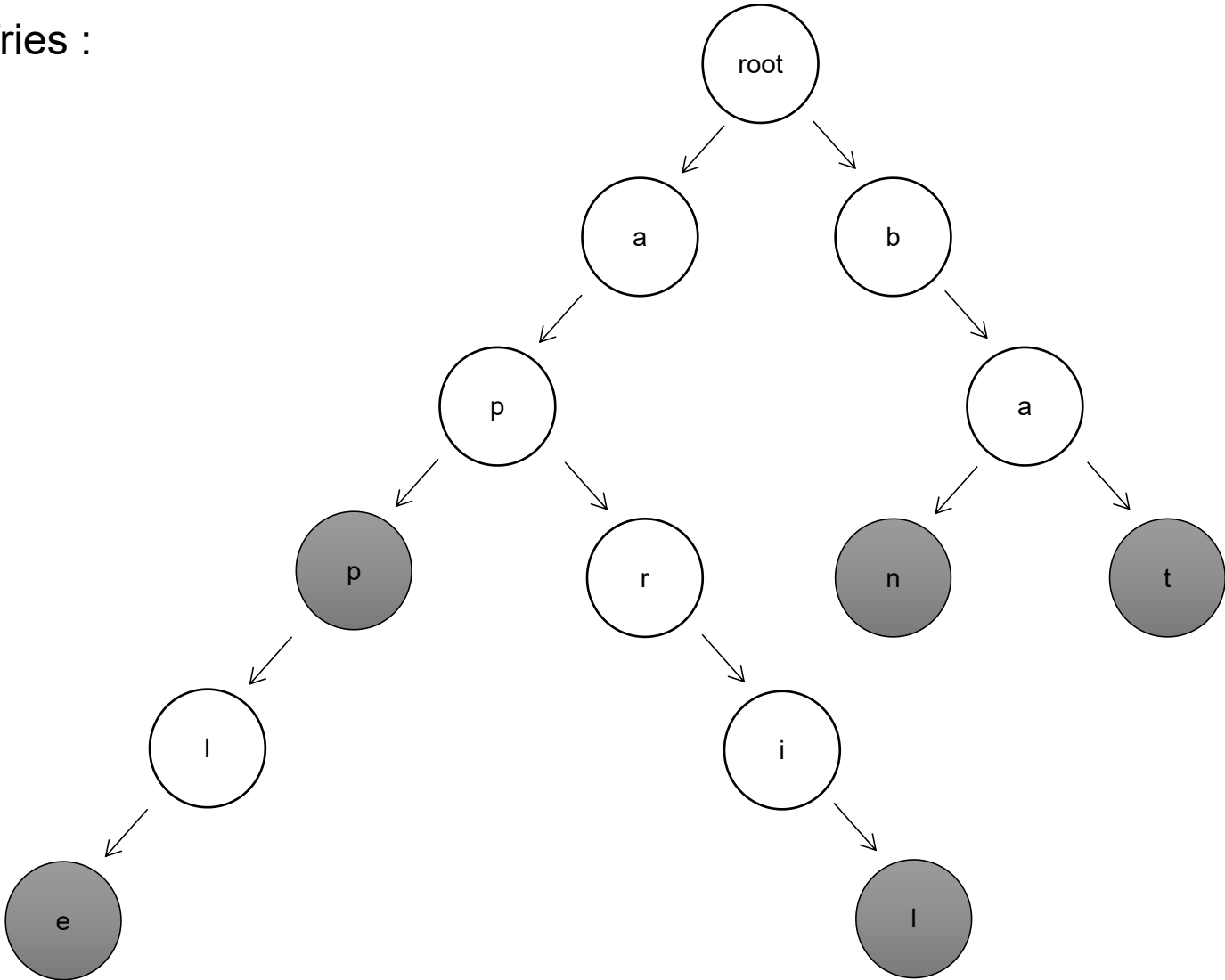


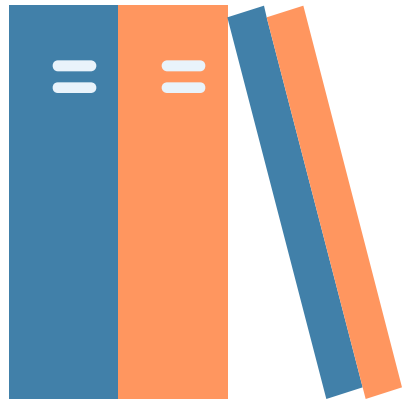
input = { apple, app, bat, ban, april }



input = { apple, app, bat, ban, april }

Hasil Tries :





04

# Live Coding