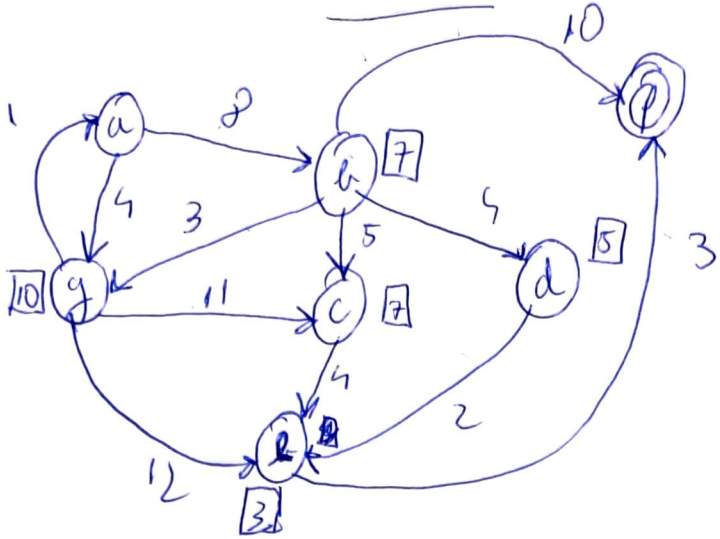
Demitru Florentin Giuliano

Grupa 233

Problema 1



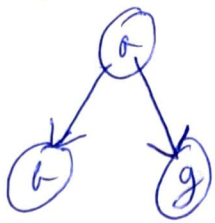
Pas 1. Arbore: (a)

Open{ Nodul (a, Fără parinte, cost=0, h=0)}

closed = { }

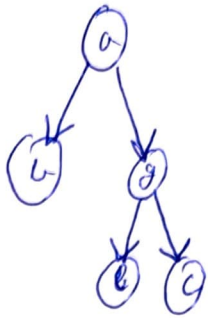
Pas 2. Expandez

Arbore



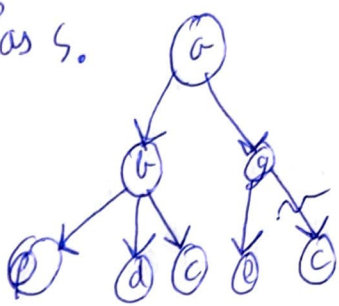
closed = {Nodul (a, Fără părinte, cost=0, h=0)}
open = {Nodul (g, a, 5, 10), Nodul (b, a, 8, 7)}

Pas 3.



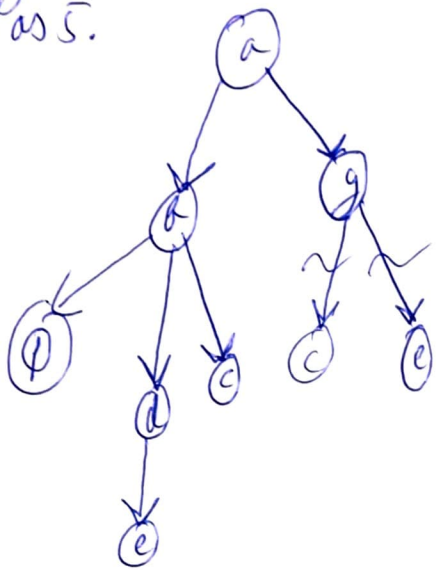
closed = {Nodul (a, Fără părinte, cost=0, h=0),
Nodul (g, a, 5, 10)}
open = {Nodul (b, a, 8, 7), Nodul (e, g, 16, 3),
Nodul (c, g, 15, 7)}

Pas 4.



closed = {Nodul (a, Fără părinte) cost=0, h=0)
Nodul (g, a, 5, 10), Nodul (b, a, cost=8, 7)}
open = {Nodul (d, b, 12, 5), Nodul (f, b, 18, 0),
Nodul (e, g, 16, 3), Nodul (c, b, 13, 2)}

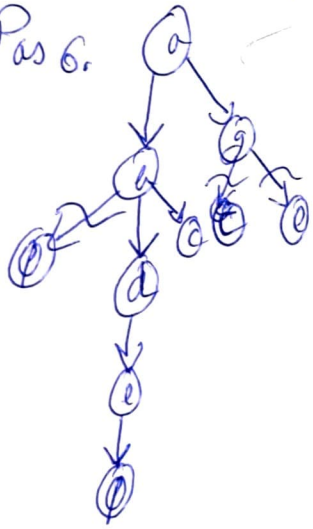
Pas 5.



closed = { Nodul (a, Null, 0, 0), Nodul (g, a, 5, 10), Nodul (b, a, 8, 7), Nodul (d, b, 12, 5) }

open = { Nodul (e, d, 15, 3), Nodul (f, b, 13, 0), Nodul (c, b, 13, 7) }

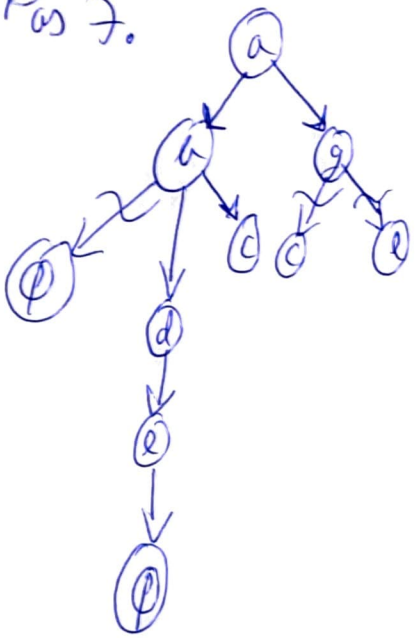
Pas 6.



closed = { Nodul (a, Null, 0, 0), Nodul (g, a, 5, 10), Nodul (b, a, 8, 7), Nodul (d, b, 12, 5), Nodul (e, d, 15, 3) }

open = { Nodul (f, e, 17, 0), ~~Nodul (c, b, 13, 7)~~ Nodul (c, b, 13, 7) }

Pas 7.



closed = [Nodul(a, Null, 0, 0), Nodul(g, a, 5, 10),
Nodul(b, a, 8, 7), Nodul(d, b, 12, 5), Nodul(e, d, 13, 3),
Nodul(f, ~~f~~, 17, 0)]

open = {Nodul(c, b, ~~13~~, 7)}

S-a oprit algoritmul, deoarece am găsit soluția de la a la f care trece prin: a → b → d → e → f, cost 17.