# Ejercicio 1 - Búsqueda en profundidad

Algoritmo = LIFO

Función sucesora = ↑ ↓ ← →

| | | | | |
|---|---|---|---|---|
| | N | | U | S |
| K | M | e | T | R |
| J | L | | | Q |
| I | | O | A | P |
| H | F | | i | |
| G | E | C | B | D |

**SÍN LIMITE**

E = { } F = {**i**} T(i) = F

E = {i} F = {A,**B**} T(B) = F

E = {i,B} F = {A,C,**D**} T(D) = F

E = {i,B,D} F = {A,**C**} T(C) = F

E = {i,B,D,C} F = {A,**E**} T(E) = F

E = {i,B,D,C,E} F = {A,F,**G**} T(G) = F

E = {i,B,D,C,E,G} F = {A,F,**H**} T(H) = F

E = {i,B,D,C,E,G,H} F = {A,F,**I**} T(I) = F

E = {i,B,D,C,E,G,H,I} F = {A,F,**J**} T(J) = F

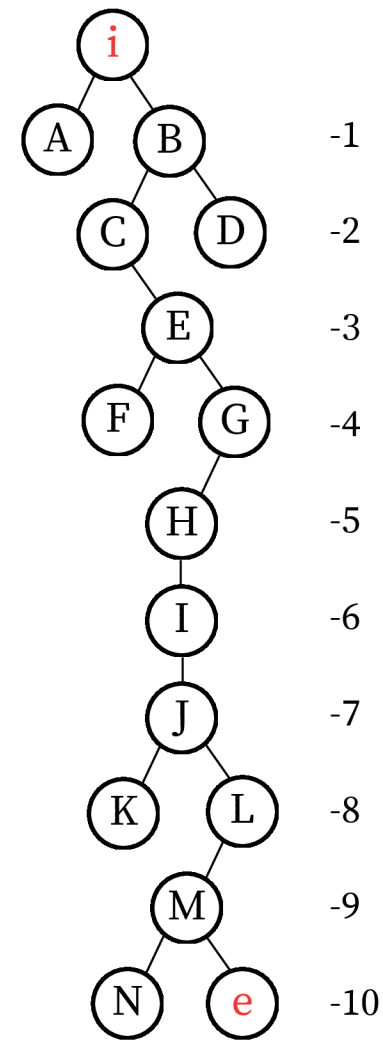
E = {i,B,D,C,E,G,H,I,J} F = {A,F,K,**L**} T(L) = F

E = {i,B,D,C,E,G,H,I,J,L} F = {A,F,K,**M**} T(M) = F

E = {i,B,D,C,E,G,H,I,J,L,M} F = {A,F,K,N,**e**} T(e) = T

E = {i,B,D,C,E,G,H,I,J,L,M,e} F = {A,F,K,N}

**Solución:** i B C E G H I J L M e




**CON LÍMITE DE PROFUNDIDAD 6**

E = { } F = {**i**} T(i) = F

E = {i} F = {A,**B**} T(B) = F

E = {i,B} F = {A,C,**D**} T(D) = F

E = {i,B,D} F = {A,**C**} T(C) = F

E = {i,B,D,C} F = {A,**E**} T(E) = F

E = {i,B,D,C,E} F = {A,F,**G**} T(G) = F

E = {i,B,D,C,E,G} F = {A,F,**H**} T(H) = F

E = {i,B,D,C,E,G,H} F = {A,**F**,I} T(F) = F

E = {i,B,D,C,E,G,H,F} F = {**A**,I} T(A) = F

E = {i,B,D,C,E,G,H,F,A} F = {I,O,**P**} T(P) = F

E = {i,B,D,C,E,G,H,F,A,P} F = {I,O,**Q**} T(Q) = F

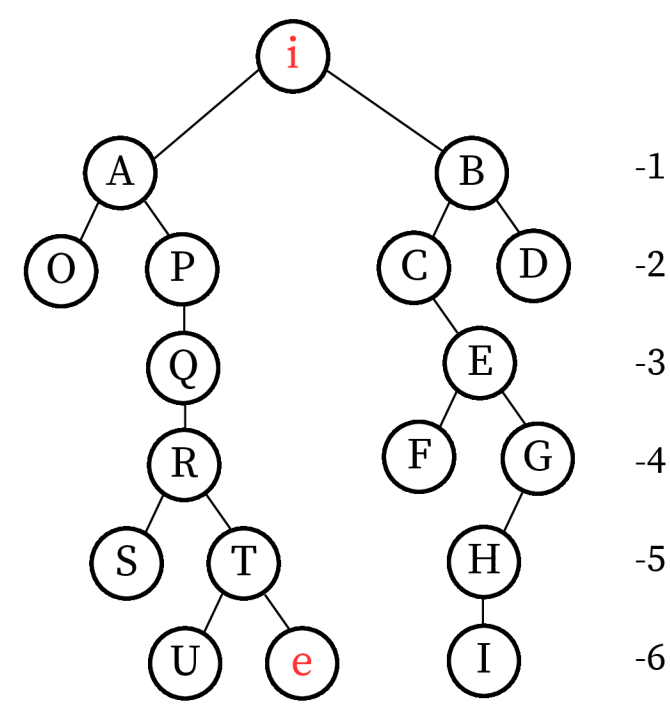
E = {i,B,D,C,E,G,H,F,A,P,Q} F = {I,O,**R**} T(R) = F

E = {i,B,D,C,E,G,H,F,A,P,Q,R} F = {I,O,S,**T**} T(T) = F

E = {i,B,D,C,E,G,H,F,A,P,Q,R,T} F = {I,O,S,U, **e**} T(e) = T

E = {i,B,D,C,E,G,H,F,A,P,Q,R,T,e} F = {I,O,S,U}

**Solución:** i A P Q R T e




**¿Qué sucede si el límite de profundidad es de 5?**

En el caso de establecer un límite de profundidad 5, no se encontraría la solución. Esto se debería a un fracaso de tipo “valor de corte”.