

LIF062- Optim Partie A
TD2a - éléments de correction

Résultats des simplexes, obtenus avec Lpsolve et un frontend OCaml maison, bien pratique :

```
let objective = "5x1+6x2+9x3+8x4"
and
  constraints = ["x1+2x2+2x3+x4<=5"; "x1+x2+2x3+3x4<=3"]
and
  lvars = ["x1"; "x2"; "x3"; "x4"]
in solvlp lvars constraints objective;;

(*Optimal (17., [|1.00000000000000022; 2.; 0.; 0.]) *)

let objective = "2x1+x2"
and
  constraints = ["2x1+3x2<=3"; "x1+2x2<=1"; "2x1+x2<=4"; "4x1+x2<=5"]
and
  lvars = ["x1"; "x2";]
in solvlp lvars constraints objective;;

(* Optimal (1.9999999999999978, [|0.99999999999999889; 0.]) *)

let objective = "3x1+5x2+8x3"
and
  constraints = ["x1+x2+x3<=100"; "3x1+2x2+4x3<=200"; "x1+2x2<=150"]
and
  lvars = ["x1"; "x2"; "x3"]
in solvlp lvars constraints objective;;

(* Optimal (475.000000000000114, [|0.; 75.; 12.500000000000142]) *)
```