

fmal v6

hir12

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(*
Notkun: powerList i j
Fyrir: i, j eru heiltölur.
Gildi: Listi lista [x1;x2;...;xN] sem inniheldur alla undirlista lista
allra heiltalna k þ.a.  $i \leq k \leq j$ , í vaxandi röð. Ef  $i \leq j$  þá er
útkoman allir undirlistar listans [i;i+1;...;j].
Ef  $i > j$  þá er útkoman [].
*)
let rec powerList i j =
  if i > j then []
  else
    map(fun x -> i::x)(powerList(i+1)j)
    @
    (powerList(i+1)j)
;;
powerList 3 6;;
powerList 10 13;;

(* output *)

powerList : int -> int -> int list list = <fun>
#- : int list list =
  [[3; 4; 5; 6]; [3; 4; 5]; [3; 4; 6]; [3; 4]; [3; 5; 6]; [3; 5]; [3; 6];
   [3]; [4; 5; 6]; [4; 5]; [4; 6]; [4]; [5; 6]; [5]; [6]; []]
#- : int list list =
  [[10; 11; 12; 13]; [10; 11; 12]; [10; 11; 13]; [10; 11]; [10; 12; 13];
   [10; 12]; [10; 13]; [10]; [11; 12; 13]; [11; 12]; [11; 13]; [11]; [12; 13];
   [12]; [13]; []]
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