```
(* Question 1. *)
let decomposer_entier n =
  let rec aux n n2 acc =
      match n, n2 with
      |   l, l2 when l2 = 0 → acc @ [(l, l2)]
      |   l, l2 → acc @ [(l, l2)] @ aux (l+1) (l2-1) acc
      in aux 0 n [];;

(* Question 2. *)
let ajouter_noeud_unaire arbres =
  List.map (fun id → Unaire(id)) arbres;;
(* Question 3. *)
let ajouter_noeud_binaire arbres1 arbres2 =
  let rec aux a a2 acc =
      match a, a2 with
      |   [], _ → acc
      |   h::t, [] → acc @ aux t arbres2 acc
      |   h::t, h'::t' → acc @ [Binaire (h, h')] @ aux a (t') acc
  in aux arbres1 arbres2 [];;
(* Question 4. *)
let taille arb =
  let rec aux arb count =
      match arb with
      |   Binaire(a, b) → count + aux a 1 + aux b 1
      |   Unaire(a) → count + aux a 1
      |   Feuille(v) → 0
  in aux arb 1;;
;;
(* Question 5. *)
let rec generer_arbres v n =
  if n = 0 then [Feuille v]
  else
      let lst1 = ajouter_noeud_unaire (generer_arbres v (n - 1))
      and decomp = decomposer_entier (n-1) in
      let lst2 = List.fold_left (fun acc (a, b) → acc @
      (ajouter_noeud_binaire (generer_arbres v a) (generer_arbres v b))) [] decomp
  in lst1 @ lst2;;
```