(\* Q.1 \*)

let moyenne\_ponderee (x1:float) (x2:float) (c1:float) (c2:float) : float =

( (x1\*.c1) +. (x2\*.c2) ) /. (c1 +. c2)

(\* Q.2 \*)

let max\_3 (n1:int) (n2:int) (n3:int) : int =

if ( n1>n2 && n1>n3) then n1 else if (n2>n3) then n2 else n3

(\* Q.3 \*)

let variance\_3 (x1:float) (x2:float) (x3:float) : float =

let m : float = (x1 +. x2+. x3) /.3.0 in

(abs\_float(x1 -. m) +. abs\_float(x2 -.m) +. abs\_float(x3-.m) )/. 3.0

(\* Q.4 \*)

let fiabilite (v1:int) (v2:int) (v3:int) : int =

if ( (v1==v2) && (v2==v3) )then 3

else if (v1==v2 || v2==v3 || v1==v3) then 2

else 0

(\* Q.5 \*)

let prix\_place (age:int) (jour:int) (heure:float) : float =

if (age<=14) then 4.5

else if (age<=26 && ( jour>=1 && jour<=5) ) then 4.90

else if ( heure>=8.0 && heure<=11.0) then 7.10

else if (age<=26 && ( jour>=6 && jour<=7) ) then 7.90

else 11.40