

TP3
HASKELL

exercise 1

$\text{isPrime} :: \text{Int} \rightarrow \text{Bool}$
 $\text{isPrime } 0 = \text{False}$
 $\text{isPrime } n = \text{isPrime}' n-1$

$\text{isPrime}' :: \text{Int} \rightarrow \text{Int} \rightarrow \text{Bool}$
 $\text{isPrime}' a b = \text{if } \text{mod}(a, b) == 0$
 then False
 else $\text{isPrime}' a (b-1)$
 $\text{isPrime}' a 1 = \text{True}$

$\text{primePrimes} :: \text{Int} \rightarrow [\text{Int}]$

$\text{primePrimes } n =$
 if $\text{isPrime } n$
 then $n : \text{primePrimes } n-1$
 else $\text{primePrimes } n-1$

$\text{primePrimes } 0 = []$

$\text{primePrimes } n = \text{filter } \text{isPrime} [1..n]$

TD 3

Exercice 2

exercice 2

resultatmonche :: (String, String) -> Int

resultatmonche =

if a == "Pierre"

then if b == "Femme"

then 1

else if b == "Pierre"

then 0

else 1

healthmatch :: [(String, String)] -> Int

healthmatch (x:xs) = resultatmonche(x) + healthmatch xs

healthmatch [] = 0