# LABO 1A - SPÉCIFICATION FACTURE DÉTAILLÉE UBER

## Entrées

|  |  |
| --- | --- |
| **Type** | **Name** |
| double | fareKm |
| int | farDuration |
| unsigned short int | serviceType |

## Constantes

YYY, sera remplacer par le type de service (uberX, uberBlack et uberPop).  
e.g. UBERX\_BASE\_FARE, UBERBLACK\_BASE\_FAR, UBERPOP\_BASE\_FARE

|  |  |
| --- | --- |
| **Type** | **Name** |
| double | VAT |
| double | YYY\_BASE\_FARE |
| double | YYY\_MINIMUM\_FARE |
| double | YYY\_PER\_MINUTE\_FEE |
| double | YYY\_PER\_KM\_FEE |
| double | YYY\_CANCELLATION\_FEE |

## Sorties

|  |  |  |
| --- | --- | --- |
| **Type** | **Nom** | **Décimale** |
| double | baseFee | 0.05 CHF |
| double | distanceFee | 0.05 CHF |
| double | durationFee | 0.05 CHF |
| double | cancellationFee | 0.05 CHF |
| double | totalFeeWithoutVat | 0.01 CHF |
| double | totalFee | 0.05 CHF |

Pseudo Code

(double) VAT = 0.08 // 8%

(string) UBERX\_DISPLAY\_NAME = UBERX  
(double) UBERX\_BASE\_FARE = 3.00  
(double) UBERX\_MINIMUM\_FARE = 6.00  
(double) UBERX\_PER\_MINUTE\_FEE = 0.30  
(double) UBERX\_PER\_KM\_FEE = 1.80  
(double) UBERX\_CANCELLATION\_FEE = 6.00  
  
(string) UBERBLACK\_DISPLAY\_NAME = UBERBLACK  
(double) UBERBLACK\_BASE\_FARE = 8.00  
(double) UBERBLACK \_MINIMUM\_FARE = 15.00  
(double) UBERBLACK \_PER\_MINUTE\_FEE = 0.60  
(double) UBERBLACK \_PER\_KM\_FEE = 3.60  
(double) UBERBLACK \_CANCELLATION\_FEE = 10.00  
  
(string) UBERPOP\_DISPLAY\_NAME = UBERPOP  
(double) UBERPOP\_BASE\_FARE = 3.003.00  
(double) UBERPOP\_MINIMUM\_FARE = 6.00  
(double) UBERPOP\_PER\_MINUTE\_FEE = 0.30  
(double) UBERPOP\_PER\_KM\_FEE = 1.35  
(double) UBERPOP\_CANCELLATION\_FEE = 6.00  
  
(unsigned short int) serviceType = donnee utilisateur  
(double) fareKm = donnee utilisateur  
(double) fareDurationMinute = donnee utilisateur  
  
(string) displayName  
(double) baseFee  
(double) minimumFe  
(double) perMinuteFee  
(double) perKmFee  
(double) cancellationFee  
(double) totalFee  
(double) totalFeeWithoutVat  
  
SI serviceType EST UBERX  
ALORS

displayName = UBERX\_DISPLAY\_NAME  
baseFee = UBERX\_BASE\_FEE  
minimumFee = UBERX\_MINIMUM\_FEE  
perMinuteFee = UBERX\_PER\_MINUTE\_FEE  
perKmFee = UBERX\_PER\_KM\_FEE  
cancellationFee = UBERX\_CANCELLATION\_FEE

SINON SI serviceType EST UBERBLACK  
ALORS

displayName = UBERBLACK\_DISPLAY\_NAME  
baseFee = UBERBLACK\_BASE\_FEE  
minimumFee = UBERBLACK\_MINIMUM\_FEE  
perMinuteFee = UBERBLACK\_PER\_MINUTE\_FEE  
perKmFee = UBERBLACK\_PER\_KM\_FEE  
cancellationFee = UBERBLACK\_CANCELLATION\_FEE

SINON SI serviceType EST UBERPOP  
ALORS

displayName = UBERPOP\_DISPLAY\_NAME  
baseFee = UBERPOP\_BASE\_FEE  
minimumFee = UBERPOP\_MINIMUM\_FEE  
perMinuteFee = UBERPOP\_PER\_MINUTE\_FEE  
perKmFee = UBERPOP\_PER\_KM\_FEE  
cancellationFee = UBERPOP\_CANCELLATION\_FEE

FIN

AFFICHER billHeader // Début canevas facture avec displayName

SI fareDurationMinute =< 0  
ALORS

CALCULER totalFee = cancellationFee  
CALCULER totalFeeWithoutVat = totalFee / (1 + VAT) // 1 = 100%  
// suite canevas avec cancellationFee  
AFFICHER billContent

SINON

CALCULER totalDistanceFee = fareKm \* perKmFee  
CALCULER totalDurationFee = fareDurationMinute \* perMinuteFee  
CALCULER totalFee = baseFee + totalDistanceFee + totalDurationFee  
  
SI totalFee < minumumFee  
ALORS

totalFee = minimumFee  
FIN  
  
CALCULER totalFeeWithoutVat = totalFee / (1 + VAT) // 1 = 100%  
// suite canevas avec baseFee + totalDistanceFee +   
// totalDurationFee  
AFFICHER billContent

FIN

// fin canevas avec totalFee et totalFeeWithoutVat  
AFFICHER billFooter