

LABO 1A – SPÉCIFICATION FACTURE DÉTAILLÉE UBER

Entrées

| Type | Name |
|--------------------|-------------|
| float | 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 |
|-------|----------------------|
| float | VAT |
| float | YYY_BASE_FARE |
| float | YYY_MINIMUM_FARE |
| float | YYY_PER_MINUTE_FEE |
| float | YYY_PER_KM_FEE |
| float | YYY_CANCELLATION_FEE |

Sorties

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

Pseudo Code

```
(float) VAT = 0.08

(string) UBERX_DISPLAY_NAME = UBERX
(float) UBERX_BASE_FARE = 3.00
(float) UBERX_MINIMUM_FARE = 6.00
(float) UBERX_PER_MINUTE_FEE = 0.30
(float) UBERX_PER_KM_FEE = 1.80
(float) UBERX_CANCELLATION_FEE = 6.00

(string) UBERBLACK_DISPLAY_NAME = UBERBLACK
(float) UBERBLACK_BASE_FARE = 8.00
(float) UBERBLACK_MINIMUM_FARE = 15.00
(float) UBERBLACK_PER_MINUTE_FEE = 0.60
(float) UBERBLACK_PER_KM_FEE = 3.60
(float) UBERBLACK_CANCELLATION_FEE = 10.00

(string) UBERPOP_DISPLAY_NAME = UBERPOP
(float) UBERPOP_BASE_FARE = 3.00
(float) UBERPOP_MINIMUM_FARE = 6.00
(float) UBERPOP_PER_MINUTE_FEE = 0.30
(float) UBERPOP_PER_KM_FEE = 1.35
(float) UBERPOP_CANCELLATION_FEE = 6.00

(unsigned short int) serviceType = donnee utilisateur
(float) fareKm = donnee utilisateur
(int) fareDurationMinute = donnee utilisateur
(string) displayName
(float) baseFee
(float) minimumFe
(float) perMinuteFee
(float) perKmFee
(float) cancellationFee

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

SI fareDurationMinute =< 0
ALORS

    CALCULER totalFee = baseFee + cancellationFee
    CALCULER totalFeeWithoutVat = totalFee / (1 + VAT)
    AFFICHER cancellationFee

SINON

    CALCULER totalDistanceFee = fareKm * perKmFee
    CALCULER totalDurationFee = fareDurationMinute * perMinuteFee
    CALCULER totalFee = baseFee + totalDistanceFee +
    totalDurationFee

    SI totalFee < mininumFee
    ALORS

        totalFee = minimumFee
    FIN

    CALCULER totalFeeWithoutVat = totalFee / (1 + VAT)
    AFFICHER baseFee, totalDistanceFee, totalDurationFee

FIN

AFFICHER totalFee, totalFeeWithoutVat
AFFICHER billFooter
```