

START Main

Constants

SET MaxSize TO 450

SET MaxWeight TO 30

Customer Info

SET name TO STR INPUT

SET address TO STR INPUT

SET phoneNumber TO STRINPUT

Parcels to Collect

SET parcelsToCollect TO INT INPUT

LOOP WHILE NOT(1 <= parcelsToCollect AND parcelsToCollect <= 6)

 DISPLAY "invalid input not between 1 and 6"

 SET parcelsToCollect TO INT INPUT

END LOOP

Parcels

SET parcels TO 0

SET parcelList TO ARRAY of PARCEL

LOOP WHILE parcels < parcelsToCollect

 SET parcel TO CreateParcel()

 ADD parcel TO parcelList

 INCREMENT parcels

END LOOP

Customer Details

DISPLAY "Customer"

DISPLAY " " name

DISPLAY " " address

DISPLAY " " phoneNumber

Parcel Details

SET parcels TO 0

SET totalCost TO 0

```

LOOP WHILE parcels < parcelsToCollect
    INCREMENT parcels
    DISPLAY "Parcel " parcels
    SET cost TO ParcelCost(parcelList AT parcels)
    # Uncollectable
    IF cost = NULL
        DISPLAY "    Cannot be collected"
    # Collectable
    ELSE
        DISPLAY "    Cost: £" cost
        # Add additional charges
        IF parcel.tracked
            DISPLAY "        Tracking: + £5.00"
            SET cost TO cost + 5
        ENDIF
        IF parcel.signature
            DISPLAY "        Signature: + £2.00"
            SET cost TO cost + 2
        ENDIF
        # Show total package cost if additional charges
        IF parcel.tracked OR parcel.signature
            DISPLAY "    Total Cost: £" cost
        ENDIF
        SET totalCost TO totalCost + cost
    ENDIF
END LOOP

# Overall cost of total collection
DISPLAY "Collection Cost: £" totalCost

END Main

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Represents a parcel

STRUCT PARCEL

height IS INT

length IS INT

width IS INT

weight IS INT

tracked IS BOOL

signature IS BOOL

ENDSTRUCT

Create a single parcel

START CreateParcel()

SET parcel

SET parcel.height TO INT INPUT

SET parcel.length TO INT INPUT

SET parcel.width TO INT INPUT

SET parcel.weight TO INT INPUT

SET parcel.tracked TO BOOL INPUT

SET parcel.signature TO BOOL INPUT

END CreateParcel RETURN parcel

Calculate the cost of a parcel

START ParcelCost(parcel IS PARCEL)

SET cost

SET size TO parcel.height + parcel.length + parcel.width

IF size > MaxSize OR parcel.weight > MaxWeight

cost = NULL

ELSE IF size > 150 OR weight > 15

cost = 30

ELSE IF size > 95 OR weight > 2

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        cost = 20
ELSE
    cost = 5
ENDIF
END ParcelCost RETURN cost
```