Scenario 1

START

SET sentinel\_value = -1

REPEAT

DISPLAY "Enter customer's area code (3 digits):"

INPUT area\_code

DISPLAY "Enter customer's phone number (7 digits):"

INPUT phone\_number

DISPLAY "Enter total number of text messages sent:"

INPUT total\_messages

IF total\_messages == sentinel\_value THEN

BREAK

ENDIF

SET base\_fee = 5.00

SET additional\_fee = 0

IF total\_messages > 100 THEN

IF total\_messages <= 300 THEN

additional\_fee = (total\_messages - 100) \* 0.03

ELSE

additional\_fee = (200 \* 0.03) + ((total\_messages - 300) \* 0.02)

ENDIF

ENDIF

SET pre\_tax\_bill = base\_fee + additional\_fee

SET tax = pre\_tax\_bill \* 0.14

SET total\_bill = pre\_tax\_bill + tax

DISPLAY "Area Code:", area\_code

DISPLAY "Phone Number:", phone\_number

DISPLAY "Total Messages:", total\_messages

DISPLAY "Monthly Bill Before Taxes: $", pre\_tax\_bill

DISPLAY "Monthly Bill After Taxes: $", total\_bill

UNTIL total\_messages == sentinel\_value

END

Scenario 2

START

SET sentinel\_value = -1

REPEAT

DISPLAY "Enter customer's area code (3 digits):"

INPUT area\_code

DISPLAY "Enter customer's phone number (7 digits):"

INPUT phone\_number

DISPLAY "Enter total number of text messages sent:"

INPUT total\_messages

IF total\_messages == sentinel\_value THEN

BREAK

ENDIF

IF total\_messages > 100 THEN

SET base\_fee = 5.00

SET additional\_fee = 0

IF total\_messages <= 300 THEN

additional\_fee = (total\_messages - 100) \* 0.03

ELSE

additional\_fee = (200 \* 0.03) + ((total\_messages - 300) \* 0.02)

ENDIF

SET pre\_tax\_bill = base\_fee + additional\_fee

SET tax = pre\_tax\_bill \* 0.14

SET total\_bill = pre\_tax\_bill + tax

DISPLAY "Area Code:", area\_code

DISPLAY "Phone Number:", phone\_number

DISPLAY "Total Messages:", total\_messages

DISPLAY "Monthly Bill Before Taxes: $", pre\_tax\_bill

DISPLAY "Monthly Bill After Taxes: $", total\_bill

ENDIF

UNTIL total\_messages == sentinel\_value

END

Scenario 3

START

SET sentinel\_value = -1

REPEAT

DISPLAY "Enter customer's area code (3 digits):"

INPUT area\_code

DISPLAY "Enter customer's phone number (7 digits):"

INPUT phone\_number

DISPLAY "Enter total number of text messages sent:"

INPUT total\_messages

IF total\_messages == sentinel\_value THEN

BREAK

ENDIF

SET base\_fee = 5.00

SET additional\_fee = 0

IF total\_messages > 100 THEN

IF total\_messages <= 300 THEN

additional\_fee = (total\_messages - 100) \* 0.03

ELSE

additional\_fee = (200 \* 0.03) + ((total\_messages - 300) \* 0.02)

ENDIF

ENDIF

SET pre\_tax\_bill = base\_fee + additional\_fee

SET tax = pre\_tax\_bill \* 0.14

SET total\_bill = pre\_tax\_bill + tax

IF total\_bill > 10 THEN

DISPLAY "Area Code:", area\_code

DISPLAY "Phone Number:", phone\_number

DISPLAY "Total Messages:", total\_messages

DISPLAY "Monthly Bill Before Taxes: $", pre\_tax\_bill

DISPLAY "Monthly Bill After Taxes: $", total\_bill

ENDIF

UNTIL total\_messages == sentinel\_value

END

Scenario 4

START

SET sentinel\_value = -1

DISPLAY "Enter the desired area code to filter bills:"

INPUT desired\_area\_code

REPEAT

DISPLAY "Enter customer's area code (3 digits):"

INPUT area\_code

DISPLAY "Enter customer's phone number (7 digits):"

INPUT phone\_number

DISPLAY "Enter total number of text messages sent:"

INPUT total\_messages

IF total\_messages == sentinel\_value THEN

BREAK

ENDIF

IF area\_code == desired\_area\_code THEN

SET base\_fee = 5.00

SET additional\_fee = 0

IF total\_messages > 100 THEN

IF total\_messages <= 300 THEN

additional\_fee = (total\_messages - 100) \* 0.03

ELSE

additional\_fee = (200 \* 0.03) + ((total\_messages - 300) \* 0.02)

ENDIF

ENDIF

SET pre\_tax\_bill = base\_fee + additional\_fee

SET tax = pre\_tax\_bill \* 0.14

SET total\_bill = pre\_tax\_bill + tax

DISPLAY "Area Code:", area\_code

DISPLAY "Phone Number:", phone\_number

DISPLAY "Total Messages:", total\_messages

DISPLAY "Monthly Bill Before Taxes: $", pre\_tax\_bill

DISPLAY "Monthly Bill After Taxes: $", total\_bill

ENDIF

UNTIL total\_messages == sentinel\_value

END