1.)

START

DECLARE accountNumber AS INTEGER

DECLARE beginningBalance, totalCharges, totalCredits, creditLimit, newBalance AS DOUBLE

WHILE TRUE

PRINT "Enter account number (-1 to end):"

INPUT accountNumber

IF accountNumber == -1 THEN

PRINT "Program ends."

BREAK

END IF

PRINT "Enter beginning balance:"

INPUT beginningBalance

PRINT "Enter total charges:"

INPUT totalCharges

PRINT "Enter total credits:"

INPUT totalCredits

PRINT "Enter credit limit:"

INPUT creditLimit

SET newBalance = beginningBalance + totalCharges - totalCredits

IF newBalance > creditLimit THEN

PRINT "Account: ", accountNumber

PRINT "Credit limit: ", creditLimit

PRINT "Balance: ", newBalance

PRINT "Credit limit exceeded."

ELSE

PRINT "Account: ", accountNumber

PRINT "Credit limit: ", creditLimit

PRINT "Balance: ", newBalance

PRINT "Credit limit not exceeded."

END IF

END WHILE

END

2.)

START

DECLARE miles, gallons, totalMiles = 0, totalGallons = 0 AS FLOAT

PRINT "Enter miles driven:"

INPUT miles

WHILE miles > 0 DO

PRINT "Enter gallons used:"

INPUT gallons

IF gallons <= 0 THEN

BREAK

END IF

PRINT "Miles per gallon: ", miles / gallons

totalMiles += miles

totalGallons += gallons

PRINT "Enter miles driven:"

INPUT miles

END WHILE

IF totalGallons > 0 THEN

PRINT "Combined miles per gallon: ", totalMiles / totalGallons

END IF

RETURN 0

END

3.)

START

DECLARE weight, cost AS INTEGER

PRINT "Weight of the parcel in grams:"

INPUT weight

IF weight > 1000 THEN

PRINT "Weight to maximum limit of 1000g"

END IF

IF weight <= 300 THEN

cost = 5

ELSE

cost = 5 + ((weight - 301) / 100 + 1) \* 2

END IF

PRINT "Delivery fee: Pesos", cost

RETURN 0

END

4.)

BEGIN

DECLARE integer variable 'choice'

DECLARE float variables 'value' and 'result'

DECLARE character variable 'repeat'

DO

PRINT "Menu options"

PRINT "(1) cm -> inches"

PRINT "(2) inches -> cm"

PRINT "(3) feet -> meters"

PRINT "(4) meters -> feet"

PROMPT user to enter choice (1-4)

READ 'choice'

PROMPT user to enter value for conversion

READ 'value'

SWITCH on 'choice'

CASE 1:

result = value / 2.54

PRINT value " cm = " result " inches"

BREAK

CASE 2:

result = value \* 2.54

PRINT value " inches = " result " cm"

BREAK

CASE 3:

result = value \* 0.3048

PRINT value " feet = " result " meters"

BREAK

CASE 4:

result = value / 0.3048

PRINT value " meters = " result " feet"

BREAK

DEFAULT:

PRINT "Invalid choice"

BREAK

END SWITCH

PROMPT user if they want to convert another (y/n)

READ 'repeat'

WHILE 'repeat' is 'y'

END

5.)

BEGIN

DECLARE integer variable 'choice'

DECLARE float variables 'radius', 'length', 'width', 'base', 'height', 'side', 'area'

DECLARE character variable 'repeat'

DO

PRINT "Menu options"

PRINT "(1) The area of circle"

PRINT "(2) The area of rectangle"

PRINT "(3) The area of triangle"

PRINT "(4) The area of square"

PROMPT user to select a shape (1-4)

READ 'choice'

SWITCH on 'choice'

CASE 1:

PROMPT user to enter the radius

READ 'radius'

area = 3.1416 \* radius \* radius

PRINT "Area of circle: " area

BREAK

CASE 2:

PROMPT user to enter the length and width

READ 'length', 'width'

area = length \* width

PRINT "Area of rectangle: " area

BREAK

CASE 3:

PROMPT user to enter the base and height

READ 'base', 'height'

area = 0.5 \* base \* height

PRINT "Area of triangle: " area

BREAK

CASE 4:

PROMPT user to enter the side

READ 'side'

area = side \* side

PRINT "Area of square: " area

BREAK

DEFAULT:

PRINT "Invalid choice"

BREAK

END SWITCH

PROMPT user if they want to compute another (y/n)

READ 'repeat'

WHILE 'repeat' is 'y'

END