Exercise 3.13
   a) *print "enter your name: "*
   b) *p = a + b + c*
   c) *if x is greater than y*
         set x to ten
      else
         set x to twenty
   d) *input a, input b, input c, input d*

Exercise 3.14
   a) *Input the first integer*
      Input the second integer
      Multiply the two numbers
      Output the product

   b) *Input the first number from the keyboard*
      Input the second number from the keyboard
      If the first number is smaller than the second number
         Print the first number
      else if the second number is smaller than the first number
         Print the second number
      else
         Print a message stating that the numbers are equal

   c) *Initialize total to zero*
      Initialize counter to zero

      Input a value from the keyboard
      While the input value is not equal to -1
         Add the number to the running total
         Add one to the counter
         Input the next number

      If counter is not equal to zero
         Set the average to the total divided by the counter
         Print the average
      else
         Print "No number was entered"

Exercise 3.16
Top
For an arbitrary number of collections of a month, determine the sale tax on the collection, including the county tax and state tax.

First refinement
Input the total collection for a month and month's name, calculate and print the sales.
Calculate and print the county sales tax, state sales tax and total sales tax.

Second refinement
Input the total amount collected in first month

While the sentinel value (-1) has not been entered for the total amount collected.
  Input the name of the month.
  Output the total collection.
  Calculate and print the sales.
  Calculate and print the county tax.
  Calculate and print the state tax.
  Calculate and print the total tax.
  Input the total amount collected in next month.

Exercise 3.17
Top
For an arbitrary number of customers' accounts, determine the required monthly payment of each customer's account.

First refinement
Input the account number, mortage amount, mortage term, interest rate. Calculate the total interest payable. Add the total interest payable to the mortage amount. Calculate and print the required monthly payment.
Then process the next customer.

Second refinement
Input the first customer's account number

While the sentinel value (-1) has not been entered for the account number.
  Input the customer's mortage amount.
  Input the customer's mortage term.
  Input the customer's interest rate.
  Calculate the total interest payable.
  Add the total interest payable to the mortage amount.
  Calculate the required monthly payment.
  Print the required monthly payment.
  Input the next customer's account number.

Exercise 3.18
Top
For an arbitrary number of salespeople, determine each salesperson's earnings for last week

First refinement
Input the salesperson's sales for the week, calculate and print the salesperson's wages for the week, then process the next salesperson.

Second refinement
Input the first salesperson's sales in dollars.
While the sentinel value (-1) has not been entered for the sales.

Calculate the salesperson's wages for the week.
Print the salesperson's wages for the week.
Input the next salesperson's sales in dollars.

Exercise 3.19
Top
For an arbitrary number of loans determine the simple interest for each loan.

First refinement
Input the principal of the loan, the interest rate, and the term of the loan, calculate and print the simple interest for the loan, and process the next loan.

Second refinement
Input the first loan principal in dollars.
While the sentinel value (-1) has not been entered for the loan principal.
 Input the interest rate.
 Input the term of the loan in days.
 Calculate the simple interest for the loan.
 Print the simple interest for the loan.
 Input the loan principal for the next loan.

Exercise 3.20
Top
For an arbitrary number of employees, determine the gross pay for each employee.

First refinement
Input the number of hours worked for the employee, enter the employee's hourly wage, calculate and print the employee's gross pay, and process the next employee.

Second refinement
Input the first employee's number of hours worked.
While the sentinel value (-1) has not been entered for the hour worked.
 Input the employee's hourly wage.
 Calculate the employee's gross pay with overtime for hours over 40.
 Print the employee's gross pay.
 Input the number of hours worked for the next employee.

Exercise 3.23
Top
Determine the largest number in ten numbers entered by the user.

First refinement
Initialize variables.
Input and count the numbers.
Determine and print the largest number.

Second refinement
Set counter to two

Input the first number directly into the variable largest
While the counter is less than or equal to ten.
  Input a new variable into the variable number.
  If the number is greater than the largest.
   Replace the largest with the number.
  Increment counter.

Print the value of the largest.