Problem 1

*A program that reads a set of floating-point values and returns the max, min, average and range.*

begin

import Scanner

float userInput, average = 0, max = min float value,

min = min float value, range = 0

int expected, count = 0

Scanner keyboard

display "H0w many numbers will you be entering?"

input value into expected

while count < expected{

display "Enter a number"

accept input into userInput

average = userInput + average

if userInput <= min {

min = userInput

}

if userInput >= max {

max = userInput

}

range = max - min

count++

}

display "max = " + max

display "min = " + min

display "average = " + average

display "range = " + range

end

Problem 2

*A program that reads a word and prints the letters in separate lines/*

begin

import Scanner

Scanner keyboard

String word

display "Enter a word: "

accept input into word

for(int i = 0, i < word.length(), i++){

display(word.charAt(i))

}

end

Problem 3

*A program that accepts a number and prints the Fibonacci number at at location.*

begin

import Scanner

int userInput, fold1 = 0, fold2 = 1, foldNew = 0, counter

Scanner keyboard

display "Enter an integer"

accept input into userInput

for (counter = 0; counter < userInput; counter ++){

foldNew = fold1 + fold2

fold2 = fold1

fold1 = foldNew

}

display "The" + counter + "th Fibonacci is: " + foldNew

end

Problem 4

*A program that prints a 10x10 multiplication table.*

begin

int product = 0

for(int n = 1; n<=10; n++) {

for(int i=1; i <= 10; i++)

{

product = n \* i;

display (product + " ");

}

if(product % 10 == 0) {

System.out.println();

}

end

Problem 5

*A program that finds the final x and y coordinate of a random walk.*

begin

import Random

Random generator

int x = 0, y = 0, intersections =0;

boolean traveling = true

int[] directions = {-1, 1}

while(traveling){

intersections++

if(intersections == 100){

break

}

int xRandomDirections = random number from directions

x = x + xRandomDirections

int yRandomDirections = random number from directions

y = y + yRandomDirections

}

display "(" + x "," + y +")"