

*Find the minimum in an array

1) Algorithm Min

Start

// is already filled with values

// we have an array with N elements

array[0...N-1]

min = +infinity

minIndex = -1

for i from 0 -> N-1:

 if array[i] < min:

 min = array[i]

 minIndex = i;

print<<"Minimum value is "<<min<<endl;

print<<"Index of minimum value is "<<minIndex<<endl;

End

*Find deposits, withdrawals and balance in an array of movements

*We have an array of int values, positive values are deposits

*negative values are withdrawals

2)Account

Start

movements[0...N-1]

totalDeposit = 0;

totalWithdraw = 0;

maxDeposit = movements[0];

maxWithdraw = movements[0];

for i from 0 -> N-1:

 if (movements[i] > 0):

 totalDeposit += movements[i]

 if (movements[i] > maxDeposit):

 maxDeposit = movements[i]

 else:

 totalWithdraw += movements[i]

 if (movements[i] < maxWithdraw)

 maxWithdraw = movements[i]

balance = totalDeposit + totalWithdraw

print<<"Total deposits are "<<totalDeposit<<endl;

print<<"Total withdrawals are "<<totalWithdraw<<endl;

print<<"Max deposit is "<<maxDeposit<<endl;

print<<"Max withdrawal is "<<-maxWithdraw<<endl;

print<<"Your balance is "<<balance<<endl;

End

*Find the sum of even numbers in an array
*if you encounter 0 or negative number, break out of the loop and print sum

3) Algorithm SumEven

Start

// this is the array of numbers

// content inside the array is not visible, just take care of the Algorithm

numbers[0...N-1]

sumEven = 0

for i from 0 -> N-1:

 if numbers[i] <= 0:

 break out of the loop;

 else if numbers[i] % 2 == 1:

 continue to the next iteration

 // if we got here, that means numbers[i] is for sure even

 sum += numbers[i]

print<<"Sum of the even numbers in the array before 0 or any negative number is "

 <<sum<<endl;

End

Print a rectangle using ''

*Ask the user for the width of the rectangle

*Print the rectangle

4) Algorithm PrintRectangle

Start

Read width;

height = 4

for i from 1 -> height:

 for j from 1 -> width:

 print<<"*";

 print<<endl;

End

*Print the following pattern (looks like half of the Christmas tree)

*

**

5) Algorithm PrintHalfTree

Start

Read N

for i from 1 -> N:

 for j from 1 -> i:

 print<<"*"

 print<<endl;

**Find mean, frequencies and STD from an array of random numbers from 1 to 9