Introduction to Computer Science Lesson 12

BSc in Computer Science University of New York, Tirana

Assoc. Prof. Marenglen Biba

Copyright © 2012 Pearson Education, Inc.

Lab session: programming in Java

- Simple algorithms
- Implemented in Java

While statement

Exercise 1

The program should continue to ask for the password until the password is right.

do...while statement

• Exercise 2

The program should continue to ask for the password until the password is right.

do...while statement

• Exercise 3

Continue to enter numbers until the sum is greater than 100.

Nested loops

• Exercise 4

For the first 100 numbers print the product a x
b.

Nested loops

• Exercise 5

 For the first 100 numbers print the product a x b only if it is multiple of 5.

Nested loops and arrays

• Exercise 6

- Given two arrays of numbers, find the elements in common for both arrays.

Hints

- First populate the arrays with numbers
- Scan both arrays for common elements
 - Check if an element of the first array is also present in the second array.

Nested loops and arrays

• Exercise 7

Given two arrays of numbers, check if the arrays are the same.

- Hints
 - First populate the arrays with numbers
 - Scan both arrays for common elements
 - Check if an element of the first array in the same position is different from the element in the second array.

Arrays and Methods

- Exercise 8
- Copy an array of characters to another specifying:
 - Starting index of the first array
 - Starting index of the second array
 - Number of elements to copy

Arrays and switch statement

- Exercise 9
- Count frequency of numbers in an array

Arrays and user defined size

• Exercise 10

- Specify the array size from command line
- Enter elements from command line
- Check whether the elements you have entered are in increasing order

End of Lesson 12

- Readings
 - Chapter 5