

# Programming with Scala: Language Exploration

## Volume 1

Bhim Upadhyaya

`bpupadhyaya@equalinformation.com`

`https://www.linkedin.com/in/bhim-upadhyaya-0648a223`

EqualInformation LLC  
Sunnyvale, CA 94089, USA

Scala Course I  
May 2, 2017



EqualInform

# Agenda

## Introduction to Computing

Introduction to Computers

Basic Components

Operation

Operating Systems

Programming Languages

Introduction to Scala

Program Attributes

Conclusion

Review Questions

Problems

Answers to Review Questions

Solutions to Problems



EqualInform

# Introduction to Computing

## Definition: Computation and Computing [O.E.D.]

- *Computation* The action of mathematical calculation.
- *Computing* The use of operation of computers.

## Examples

- $1 + 1 = 2$
- $13 + 29 = 42$

## Questions

- Are these computational problems?
- Is there any difference between two?

# Introduction to Computing contd...

Is it a computational problem?

SN	Hierarchy	Human	Dog	Domestic Pigeon
1	<i>Kingdom</i>	Animalia	Animalia	Animalia
2	<i>Phylum</i>	Chordata	Chordata	Chordata
3	<i>Class</i>	Mammalia	Mammalia	Aves
4	<i>Order</i>	Primates	Carnivora	Columbiformes
5	<i>Family</i>	Hominidae	Canidae	Columbidae
6	<i>Genus</i>	Homo	Canis	Columba
7	<i>Species</i>	H. Sapiens	C. lupus	C. livia

# Introduction to Computers

(Item here)

(item description)

(item here)

(item description)

- (point 1)
- (point 2)
- (point 3)
- (point 4)

# Basic Components

(content here)



EqualInform

(content here)



EqualInform

- ① (point here)
- ② (point here)
- ③ (point here)
- ④ (point here)



EqualInform



(content here)



EqualInform

# Introduction to Scala

(content here)

## Examples

(content here)



EqualInform

# Program Attributes

(content here)

## Examples

(content here)



EqualInform

# Conclusion

(content here)

## Examples

(content here)



EqualInform

# Review Questions

(content here)

Examples

(content here)



EqualInform

# Problems

(content here)

## Examples

(content here)



EqualInform

# Answers to Review Questions

- Easy to use
- Clarity in interpretation



EqualInform

# Solutions to Problems

- (show scala code snippet here)
- Engine implementation



EqualInform