Chapter 1 - Variables and datatypes
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Just like we have some rules that we follow to
Speak english (the grammar), we have some rules to
follow while writing a Java program. The set
of these rules is ralled syntax.
Just like we have some rules that we follow to speak english (the grammar), we have some rules to follow while writing a Java program. The set of these rules is called syntax.  Vocabulary & Grammar of Java.
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Variables
A variable is a container that stores a value
This value can be changed during the execution of the program.
of the program
Example:
int number = 8; Value it Stores!
Data type variable name
District deal of the state of t
Rules for declaring a variable name. We can choose a name while declaring a Java variable if the following rules are followed:
We can choose a name while declaring a Java Variable
17 The following rules are followed:
Must not her will a list wint 1000 in interest
Nome is care fire a dujt - Int 100 / 5 15 Invalid!
Must not begin with a digit -> int larry: is invalid!  Name is case sensitive -> harry and Harry are different!  Should not be a keyword (like void)
lallita Chaca mot allo set
White Space not allowed int Code With Harry: is invalid  Can contain alphabets, & character, _ character and digits if  the other conditions are met.
the other conditions current wind digits if
The only continues we firet
Data Tubes
Data tupes in bus fall under the fill is cal
Data Types  Data types in Java fall under the following Categories  Primitive Data Types (Intrinsic)  Non-Primitive Data Types (Derived)
Non-Primitive Data Tubes (Desired)
The state of the s

	LDC1
	Simifive Data Types
	Java is Statically typed> Variables must be declared before
vi	Primitive Data Types  Java is Statically typed. > Variables must be declared before  There are 8 primitive data types Supported by Java:  byte > Value ranges from -128 to 127  • Takes 1 byte
101/2	byte -> · Value ranges from -128 to 127
10	Takes 1 byte
	· Default value is 0
or La	Annual Management of the Control of
2>	Short - Value ranges from - (2 1/2 to (2)/2 -1
	· Takes 2 bytes
3	· Default Value is 0
Mari	the state of the s
3,	int -> · Value ranges from - $(2^{32})/_2$ to $(2^{32})/_2$ -1  • Takes 4 by ks  • De fault Value 15 0
	Tokes 4 hubi
	De fault Value is a
	of june 190
47	float -> · Value ranges from (see Docs)
*	float -> · Value ranges from (see Docs)  · Takes 4 by tes
Shiller	Default value is 0.0f
52	long -> · Value ranges from - (2 54)/2 to (2 54)/2 -1
1.1	· Takes 8 by les
1	· Default value is 0
*	( Love all) browned to ad for bloode he
67	double - value ranges from (secdocs)
	double - Value ranges from (see docs)  Takes 8 bytes
l.	· Default Value is 0 od
7,	char → Value ranges from 0 to 65535 (21-1)
2.11	• Takes 2 bytes → because it supports unicode
	<ul> <li>Takes 2 bytes → because it supports unicode</li> <li>Default Value is '\u00000'</li> </ul>
	Louis Department and les
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