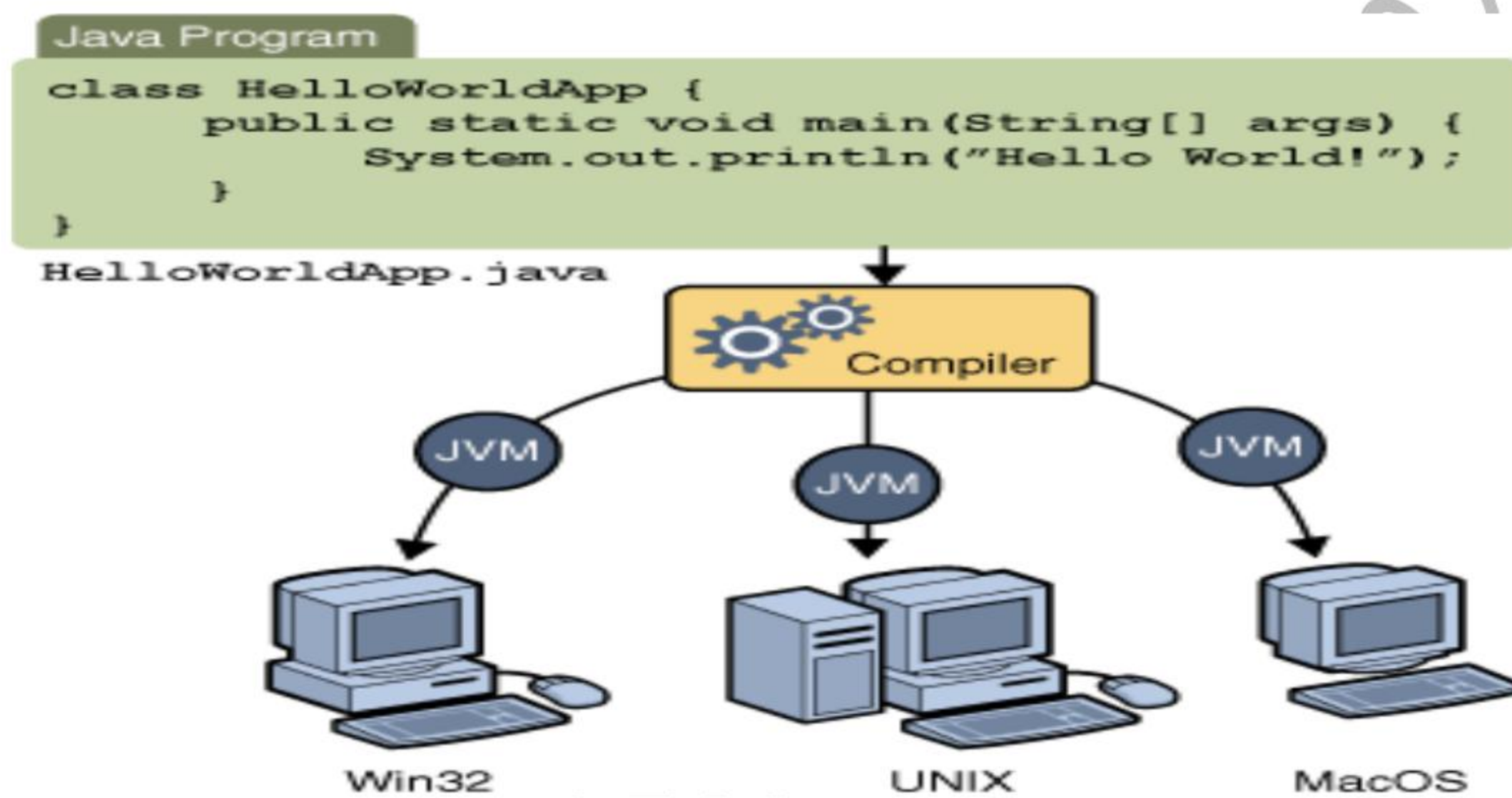


Chapter 1: Java Introduction

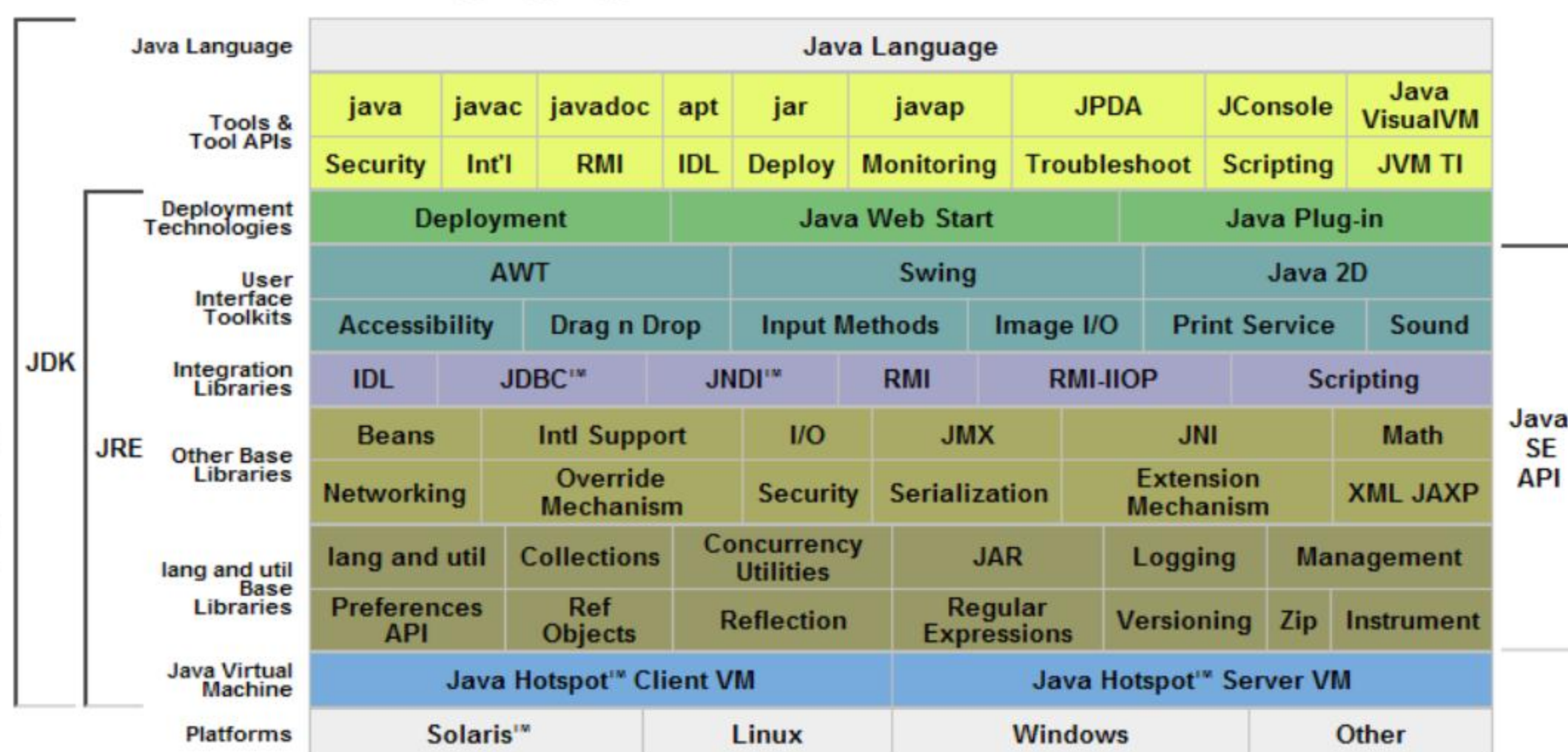
Java:

Java is simple, object oriented, robust, platform independent, concurrent and secured general purpose programming language developed by James Gosling & team.

Platform Independent:



Java Environment:



Comments:

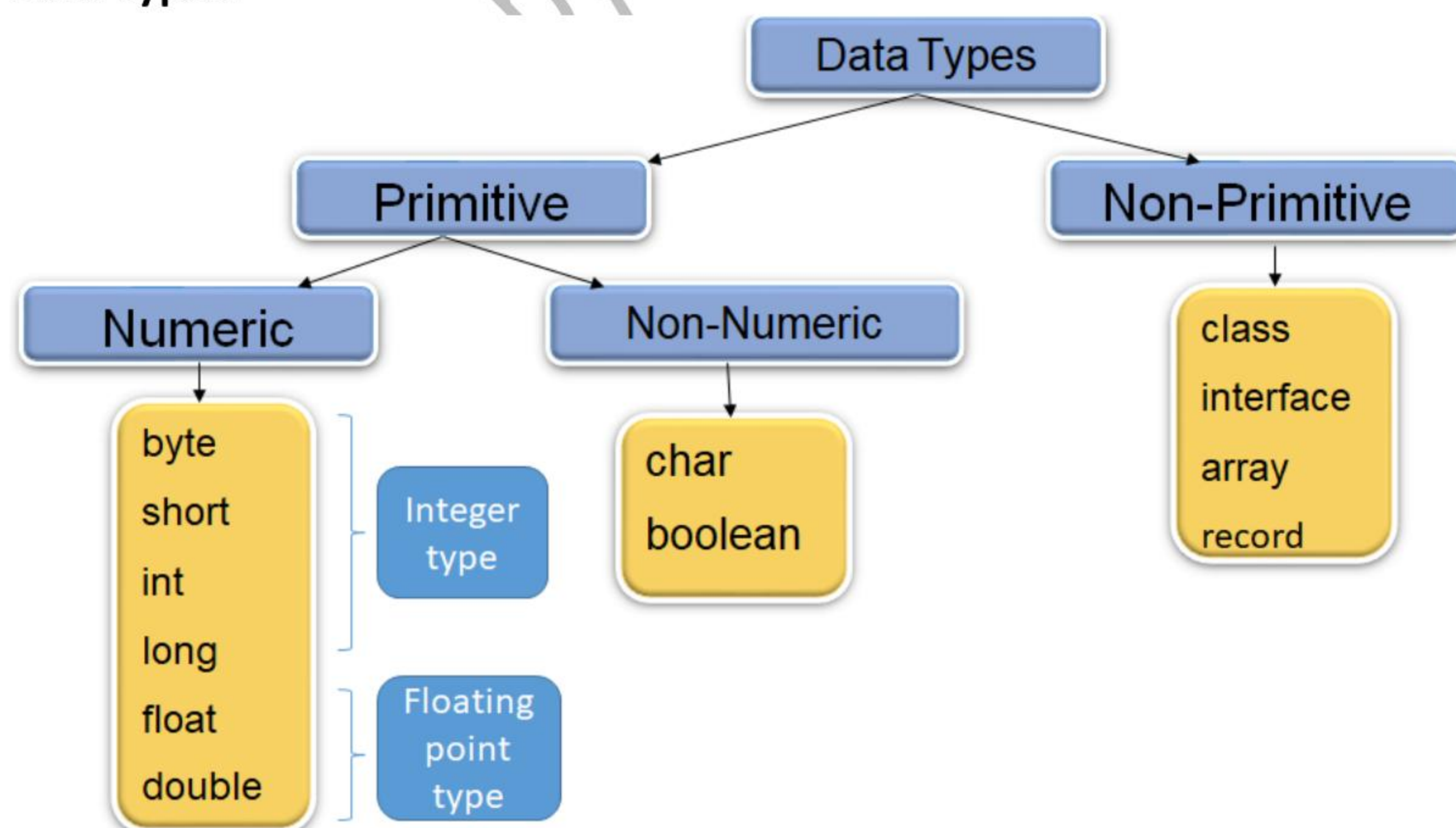
- The comments are useful for documentation purpose.
- Java supports two types of comments:
 - Single line Comment: //
 - Multiline Comment: /* */

Keywords:

List of Java Keywords				
Primitive Types and void	Modifiers	Declarations	Control Flow	Miscellaneous
1. boolean	1. public	1. class	1. if	1. this
2. byte	2. protected	2. interface	2. else	2. new
3. char	3. private	3. enum	3. try	3. super
4. short	4. abstract	4. extends	4. catch	4. import
5. int	5. static	5. implements	5. finally	5. instanceof
6. long	6. final	6. package	6. do	6. null
7. float	7. transient	7. throws	7. while	7. true
8. double	8. volatile		8. for	8. false
9. void	9. synchronized		9. continue	9. strictfp
	10. native		10. break	10. assert
			11. switch	11. _ (underscore)
			12. case	12. goto
			13. default	13. const
			14. throw	
			15. return	

All keywords are in lowercase

Data Types:



Data Type Range:

Java Primitive Data Types				
Type	Values	Default	Size	Range
byte	signed integers	0	8 bits	-128 to 127
short	signed integers	0	16 bits	-32768 to 32767
int	signed integers	0	32 bits	-2147483648 to 2147483647
long	signed integers	0	64 bits	-9223372036854775808 to 9223372036854775807
float	IEEE 754 floating point	0.0	32 bits	+/-1.4E-45 to +/-3.4028235E+38, +/-infinity, +/-0, NaN
double	IEEE 754 floating point	0.0	64 bits	+/-4.9E-324 to +/-1.7976931348623157E+308, +/-infinity, +/-0, NaN
char	Unicode character	\u0000	16 bits	\u0000 to \uFFFF
boolean	true, false	false	1 bit used in 32 bit integer	NA

Identifiers:

- Identifier is a name given to the variables, constants, arrays, classes, methods, etc.
- Following are the rules for the identifier names:
 - 1. It can be any sequence of lowercase letters, uppercase letters, digits, underscore and \$ sign.
 - 2. It must not begin with a digit
 - 3. The names are case sensitive.
 - 4. The keywords cannot be used as identifier names.

Variables & Constants:

- Variable:
 - Variable is a programming element whose value can change during the execution of the program.
 - Variable can be declared anywhere within a method but it must be declared before it is used.
 - eg: int a = 10;
- Constant:
 - Constant is a programming element whose value cannot change during the execution of the program.
 - eg: final double PI = 3.14159;

Command Line Arguments:

- At times we want to pass information into a program when we run it. This can be accomplished by passing command-line-arguments to main().
- A command-line-argument is information that directly follows the programs name on the command line when it is executed.
- To access the command-line-arguments we can simply access the array (args) element and use them in the program.