# **Basic Core Cheat Sheet**

# **Primitive Data Types**

Data Type	Size	Range
byte	8	-128127
short	16	-32,76832,767
int	32	-2,147,483,648 2,147,483,647
long	64	-9,223,372,036,854,775,808 9,223,372,036,854,775,807
float	32	3.4e-0.38 3.4e+0.38
double	64	1.7e-308 1.7e+308
char	16	Complete Unicode Character Set
Boolean	1	True, False

## **Java Operator**

Operator Type	Operators
Arithmetic	+, -, *, ?, %
	=, +=, -=, *=, /=, %=, &=, ^=,  =,
Assignment	<<=, >>=, >>>=
Bitwise	^, &,
Logical	&&,
Relational	<, >, <=, >=,==, !=
Shift	<<, >>, >>>
Ternary	?:
Unary	++x, -x, x++, x-, +x, -x, !, ~

#### Comments:

// Single line /\* Multiple line \*/

## Java Variables:

{public | private} [static] [type] [name] =[ expression | value];

### Java Methods:

{public | private} [static] {type | void} name(arg1, ...,
argN ){statements}

## **Basic Java Program:**

public class World{
 public static void main(String[] args)
 { System.out.println("Hello Java cheat Sheet!");}}

# Compile and execute Java program

Save as JavaFile.java Compile : javac JavaFile Execute: java JavaFile

#### **Iterative Statements**

// for loop

for (condition) {expression}

// for each loop

for (type name: array|collection) {expression}

// while loop

while (condition) {expression}

// do while loop

do {expression} while(condition)

#### **Decisive Statements**

//if statement

if (condition) {expression}

//if-else statement

if (condition) {expression} else {expression}

//Ternary Operator

(condition) ?{true expression} : {falseexpression}

//if -else if -else statement

if (condition) {expression} else if (condition)

{expression} else {expression}

//switch statement

switch (var)

{ case 1: expression; break;

case 2: expression; break;

...

default: expression; break; }

### Java Arrays:

Single Dimensional (1-D)

Initializing:

type[] varName= new type[size];

Declaring:

type[] varName= new type[]{values1, value2,...};

Multi Dimensional (2-D)

Initializing:

datatype[][] varName = new dataType[row][col];

Declaring:

datatype[][] varName = {{value1, value2....},{value1, value2....}.};