**Java Cheat Sheet**

**Primitive Types**:

INTEGER: byte(8bit), short(16bit), int(32bit),long(64bit)

DECIM:float(32bit),double(64bit) Boolean(1bit), char (Unicode)

**Primitive Operators**

Boolean Binary: == != > >= < <=

Boolean Binary Only: && ||

Bitwise Operators: ~ & ^ | << >> >>>

Ternary Operator: bool?valtrue:valfalse;

**Casting, Conversion**

int x = (int)5.5;

int x = Integer.parseInt(“123”);

float y = Float.parseFloat(“1.5”);

int x = Integer.parseInt(“7A”,16); //fromHex

String hex = Integer.toString(99,16);//toHex

**input**

Scanner sc = new Scanner(System.in);

int i = sc.nextInt(); //stops at whitespace

String line = sc.nextLine(); //whole line

BufferedReader reader =new BufferedReader(new InputStreamReader(System.in));

String name = reader.readLine();

int age = Integer.parseInt(reader.readLine());

**String Methods**

boolean equals(String other);

int length();

char charAt(int i);

String substring(int i, int j);

boolean contains(String sub);

boolean startsWith(String pre);

boolean endsWith(String post);

int indexOf(String p)

int indexOf(String p, int i);

int compareTo(String t);

//“a”.compareTo(“b”) -> -1

String replaceAll(String str, String find);

String[] split(String delim);

**ARRAYS:**

int[] x = new int[10];

int[][] x = new int[5][5];

int[] x = {1,2,3,4};

x.length; //int expression length of array

int[][] x = {{1,2},{3,4,5}}; //ragged array

String[] y = new String[10];

//loop through array:

for(int i=0;i<arrayname.length;i++) {

//use arrayname[i];

**Math**

Math.abs(NUM),Math.log(NUM),Math.max(A,B),Math.min(C,D),

Math.pow(A,B),Math.round(A),Math.random()