**Java BPA Condensed Reference Sheet**

**Reading From a Text File**

 File f = **new** File("ages.txt");

 **try**

 {

 Scanner s = **new** Scanner(f);

 **while**(s.hasNextLine())

 {

 *process*(s.nextLine());

 }

 } **catch** (FileNotFoundException e1)

 {

 e1.printStackTrace();

 }

**Splitting Items From a Line in a Text File**

**public** **static** **void** process (String st)

{

 Scanner s = **new** Scanner(st);

 s.useDelimiter(","); //Assuming a comma is used to separate line items

 **if**(s.hasNext())

 {

 String name = s.next();

 String value = s.next();

 System.*out*.println("Name: "+ name + "- Age: "+ value);

 }

 **else**

 {

 System.*out*.println("Empty or invalid line. Unable to process.");

 }

}

**Writing Items to a Text File**

String [] names = {"Bill", "Anne", "Emma", "Will", "Joey",

 "Molly", "Roland", "Cassie", "Reggie", "Kyle"};

**try**

 {

 FileWriter f = **new** FileWriter("sample.txt"); //adding true - second parameter will append the data to existing, otherwise it overwrites the data.

 PrintWriter output = **new** PrintWriter(f);

 **for** (**int** x = 0; x < names.length; x++)

 {

 output.println(names[x]);

 }

 output.close();

 } **catch** (IOException e)

 {

 e.printStackTrace();

 }

**Sorting an Array (BubbleSort)**

**int**[] nums = **new** **int**[20];

 **for** (**int** x = 0; x < nums.length; x++)

 nums[x]=(**int**) (Math.*random*()\*1000)+1;

 //Before

 System.*out*.println("Integer Array Before");

 **for**(**int** n:nums) System.*out*.print(n + " ");

 **for** (**int** x=0; x<nums.length; x++)

 {

 **for**(**int** y = 0; y < nums.length-1; y++)

 {

 **if** (nums[y]>nums[y+1])

 {

 **int** temp = nums[y];

 nums[y]=nums[y+1];

 nums[y+1]=temp;

 }

 }

 }

//After sort

 System.*out*.println("\n\nInteger Array After");

 **for**(**int** n:nums) System.*out*.print(n + " ");

**Sorting an Array (Using Arrays Class)**

 **int**[] nums = **new** **int**[20];

 **for** (**int** x = 0; x < nums.length; x++)

 nums[x]=(**int**) (Math.*random*()\*1000)+1;

 //Before

 System.*out*.println("Integer Array Before");

 **for**(**int** n:nums) System.*out*.print(n + " ");

 Arrays.*sort*(nums);

 //Before

 System.*out*.println("Integer Array After");

 **for**(**int** n:nums) System.*out*.print(n + " ");