**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 + " ");