Name _____ Period_____

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1. Indicate the stack and the output for the code below.

Code	Stack	Output
| ```java
public static void showMe(int arg)
{
    if (arg < 10)
    {
        showMe(arg + 1);
    }
    else
    {
        System.out.print(arg + " ");
    }
}

public static void main(String args[]){

    showMe(0)
}
``` | ShowMe(9)<br>showMe(8)<br>showMe(7)<br>showMe(6)<br>showMe(5)<br>showMe(4)<br>showMe(3)<br>showMe(2)<br>showMe(1)<br>showMe(0) | 10 |

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2. Indicate the stack and the output for the code below

Code	Stack	Output
| ```java
public static void whatsItDo(String str)
{
   int len = str.length();
      if (len > 1)
      {
 String temp = str.substring(0, len – 1);
 System.out.println(temp);
 whatsItDo(temp);
      }
}

public static void main(String args[]){

    whatsItDo("WATCH")
}
``` | whatsItDo("W")<br>whatsItDo("WA")<br>whatsItDo("WAT")<br>whatsItDo("WATC")<br>whatsItDo("WATCH") | <br>WATC<br>WAT<br>WA<br>W |

3. Indicate the stack and the output for the code below

Code	Stack	Output
(see below)		

```
public static void puf(int n)
{
    if(n == 1)
    {
        System.out.print("x");
    }
    else if( n%2 = = 0) //n is even
    {
        System.out.print("{");
        puf(n-1);
        System.out.print("}");
    }
    else //n is odd
    {
        System.out.print("<");
        puf(n-1);
        System.out.print(">");
    }
}
public static void main(String args[]){
    puf(5);
}
```

Stack:
```
puf(1)
puf(2)
puf(3)
puf(4)
puf(5)
```

Output:
```
<{<{x}>}>
```

4. Indicate the stack and the output for the code below

Code	Stack	Output
(see below)		

```
public static void sort(int[] data)
{
for (int j = 0; j < data.length - 1; j++)
{
  int m = j;
  for (int k = j + 1; k < data.length; k++)
  {
     if (data[k] < data[m])
     /* Compare values */
     {
     m = k;
     }
  }
int temp = data[m];
/* Assign to temp */
data[m] = data[j];
data[j] = temp;
/* End of outer loop */
}
}
public static void main(String args[]){

    int[] iArr = {1, 5, 3};
    sort(iArr);
}
```