**Recursion tracing**

***Worksheet #1***

void fun(int x)

{

if (x >= 1) {

out.print(x);

fun(x-1);

}

}

1. What is output by fun(3) ?

**321**

void fun(int x)

{

if (x < 1)

out.print(x);

else {

out.print(x);

fun(x-1);

}

}

2. What is output by fun(3) ?

**3210**

3. What is returned by fun(3)?

int fun(int x)

{

if (x < 1)

return x;

else

return x + fun(x-1);

}

**6**

4. What is returned by fun(3,6)?

int fun(int x, int y)

{

if (y == 2)

return x;

else

return fun(x, y - 1) + x;

}

**15**

5. What is returned by fun(4,2)?

**4**

**Solutions below in white. Download this document and change the font color to view.**

1. **321**
2. **3210**
3. **6**
4. **15**
5. **4**