**Silver Roi Ramos**

**Introduction to Programming**

**Algorithm II**

Code Sample 1 - function and return I

1) *function* a(){

2) console.log('hello');

3) }

4) console.log('Dojo');

Output: Dojo

Code Sample 2 - function and return I

1) *function* a(){

2) console.log('hello');

3) return 15;

4) }

5) x = a();

6) console.log('x is', x);

Output: hello, x is 15

Code Sample 3 - function and return I

1) *function* a(n){

2) console.log('n is', n);

3) return n+15;

4) }

5) x = a(3);

6) console.log('x is', x);

Output: n is 3, x is 18

Code Sample 4 - function and return I

1) *function* a(n){

2) console.log('n is', n);

3) y = n\*2;

4) return y;

5) }

6) x = a(3) + a(5);

7) console.log('x is', x);

Output: n is 3, n is 5, x is 16

Order of Operations - please  read <http://www.montereyinstitute.org/courses/DevelopmentalMath/COURSE_TEXT_RESOURCE/U01_L5_T2_text_final.html>

Code Sample 5 - order of operations I

1) *function* op(a,b){

2) c = a+b;

3) console.log('c is', c);

4) return c;

5) }

6) x = op(2,3) + op(3,5);

7) console.log('x is', x);

Output: c is 5, c is 8, x is 13

Code Sample 6 - order of operations II

1) *function* op(a,b){

2) c = a+b;

3) console.log('c is', c);

4) return c;

5) }

6) x = op(2,3) + op(3,op(2,1)) + op(op(2,1),op(2,3));

7) console.log('x is', x)

Output: c is 5, c is 3, c is 6, c is 3, c is 5, c is 8, x is 19

Code Sample 7 - scoping

1) var x = 15;

2) *function* a(){

3) var x = 10;

4) }

5) console.log(x);

6) a();

7) console.log(x);

Output: 15, 15