Branden Hitt

CS 4080 ICE 3

Problem 1

1) a=5, b=3, c=30, tag = true;

(a < b) || !tag && (b / (2\*a\*b-c)> 0)

a) 1) a<b = false

2) b/(2\*a\*b-c)>0 = error can’t divide by zero

3) !tag && result of 2

4) result of 1 || result of 3

b) a<b = false

b/(2\*a\*b-c)>0 = error can’t divide by zero

c) The result is error: java.lang.ArithmeticException: / by zero

2) a=5, b=3, c=30, tag = false;

(a > b) || !tag && ( b / (2\*a\*b-c)>0)

a) 1) a>b = true

2) b/(2\*a\*b-c)>0 = error can’t divide by zero

3) !tag && result of 2

4) result of 1 || result of 3

b) a>b = true (true || expression always evaluates to true so stop and return true)

c) The result is true

Problem 2

1) == is different from === in JavaScript because it protects from coercion.

“7” == 7 evaluates to true

“7” === 7 evaluates to false because the string is not coerced to a number

2) Using an assignment as an expression allows it to be used as an expression while also being an operand in another expression.

For example in C:

while( (ch = getchar() ) != EOF) {…}

3) The python shell outputs: “ 3 5 ”

Problem 3 (Java)

for(int k=(j+3)/27; k<=10; k+=1.2){

i=3\*k-1;

}

Problem 4 (Java)

switch(k){

case 1:

j=2\*k-1;

break;

case 2:

j=2\*k-1;

break;

case 3:

j=3\*k+1;

break;

case 4:

j=4\*k-1;

break;

case 5:

j=3\*k+1;

break;

case 6:

j=k-2;

break;

case 7:

j=k-2;

break;

default:

break;

}

Problem 5 (Java)

for(int i=0;i<n;i++){

for(int j=0;j<n;j++){

if(x[i][j] != 0) {

i++;

j=0;

}

}

System.out.println("First all-zero row is:"+(i+1));

i=n;

}