# 44-542 Object-Oriented Programming

# Control Structures Review

1. Assume a, b, and c have been declared as int values. Find the output of the following code segment in each of the following three cases:
   1. a = 10; b = 9;
   2. a = 5; b = 9;
   3. a = 5; b = 5;

if(a == b)

{

c = a + b;

} else if(a < b)

{

c = a - b;

} else

{

c = b - a;

}

System.out.println(c);

1. Find the output of the following code segment.

int a = 10;

while(a < 20)

{

System.out.println(a);

}

1. Find the output of the following code segment.

for(int a = 25; a > 5; a -= 4)

{

System.out.println(a);

}

1. Find the output of the following code segment.

for(int a = 25; a < 50; a += 5)

{

System.out.println("b values");

for(int b = 1000; b > 50; b /= 2)

{

System.out.print(b + " ");

**}**

System.out.println();

System.out.println("a = " + a);

}

1. Find the output of the following code segment.

int b;

for(int a = 125; a < 750; a += 100)

{

System.out.println("b values");

b = 1000;

while(b > a)

{

System.out.print(b + " ");

b = b - a;

}

System.out.println();

System.out.println("a = " + a);

}

1. Find the output of the following code segment.

String myStr = "Midge is six years old";

int idx;

while(myStr.length() >= 1)

{

idx = myStr.indexOf(" ");

if(idx == -1)

{

System.out.println(myStr.substring(0));

myStr = "";

} else

{

System.out.println(myStr.substring(0, idx));

myStr = myStr.substring(idx + 1);

idx = myStr.indexOf(" ");

if(idx == -1)

{

myStr = "";

}else

{

myStr = myStr.substring(idx + 1);

}

}

1. Find the output of the code segment from the previous problem if **myStr** is initialized to **Midge is six years old and now Zelda is eleven years old**.