

## Part A: Basic While Loops

Prerequisite: Lecture or Reading on Chapter 7 Sections 1-2

Please work with a partner.

When you are finished with both parts, call the instructor over for signoff

1. Determine the output of the following while loop:

```
int i = 10, num = 30;
while(i < num)
{
    System.out.println(i);
    i = i + 5;
}
```

i	(i < num)	Console

2. Determine the output of the following do-while loop:

```
int i = 10, num = 30;
do {
    System.out.println(i);
    i = i + 5;
} while(i < num);
```

i	(i < num)	Console

3. Determine the output of the following while loop:

```
int i = 0;
while ( i < 3) {
    if ( i == 0) {
        ...println("zero");
    }
    else {
        ...println( i );
    }
    i = i + 1;
}
```

i	i<3	i==0	Console

4. Create a new project called **lab7** in BlueJ. Create a new class called **Sandwich** and do the online

## Sandwich Program

## Part B: Loop Applications: Summing and Counting, Tables

Prerequisite: Lecture or Reading on Chapter 7 Sections 3-10

5. Determine the output of the following while loop:

```
double tempC = 20, tempF;
while ( tempC <= 40) {
    tempF = 1.8*tempC + 32;
    System.out.println(tempC + " C = " + tempF + " F");
    tempC = tempC + 5;
}
```

tempC	tempF	tempC < =40	Console

6. Determine the output of the following while loop:

```
int sum = 0;
int k = 0, num;
while ( k < 5) {
    num = keyboard.nextInt();
    sum = sum + num;
    k = k + 1;
}
System.out.println("sum is " + sum);
System.out.println("avg is " + sum/5.0);
```

sum	num	k	k < 5	Console

7. In your lab 7 project, create a new class called Checkout and do the online [Checkout Program](#)