This quiz is to be taken by yourself with closed books, closed notes, no electronic devices.

What will be output from the following code:

```java
int x = 0;
int y = 5;
while ( x < 10 && y <= 7 ) {
    x++;
    y++;
    System.out.println( x + " " + y );
}
System.out.println( x + " " + y );
```

What will be output from the following code:

```java
int x = 2;
int y = 5;
while ( x < 3 || y <= 6 ) {
    System.out.println( x + " " + y );
    x++;
    y++;
}
System.out.println( x + " " + y );
```

Write the equivalent statement using the other variable for each statement (A and B) below. In A) write the equivalent statement using noise, in B) write the equivalent statement using foo. Assume the following declarations:

```java
Sound noise = new Sound( FileChooser.pickAFile() );
SoundSample[] foo = noise.getSamples();
```

A) `foo[17].setValue( 4444 );`

B) `noise.getSampleValueAt( i );`
Which of the following loops will NOT cause an ArrayIndexOutOfBoundsException exception? Circle all the correct answers. There may be more than one correct answer. [Correct +1; Incorrect: -1; No negative score]

A) for ( int i = 16; i < this.getWidth(); i++ )
B) for ( int i = this.getWidth() – 16; i > 0; i-- )
C) for ( int i = -1; i < this.getWidth(); i++ )
D) for ( int i = 0; i <= this.getWidth(); i++ )
E) for ( int i = this.getWidth(); i > 0; i-- )
F) for ( int i = this.getWidth() – 1; i >= 0; i-- )

What gets printed by this code? Assume the calling object (this) is a Sound object and this code is in Sound.java

```java
public void guess()
{
    SoundSample[] noiseArray = this.getSamples();
    int a = 10, b = 0;
    for (int i = 0; i < noiseArray.length; i++)
    {
        SoundSample sample = noiseArray[i];
        int foo = sample.getValue();
        if (foo > a)
        {
            a = foo;
            b = i;
        }
    }
    System.out.println(a + "", + b);
}
```

Put your answer here: __________

What is printed if the line if ( foo > a ) was changed to if ( foo <= a )? __________

What is printed if the line if ( foo > a ) was changed to if ( foo >= a )? __________

What is printed if the line if ( foo > a ) was changed to if ( foo < a )? __________

What is printed if the line if ( foo > a ) was changed to if ( foo == a )? __________

What is printed if the line if ( foo > a ) was changed to if ( foo != a )? __________