IB Computer Science **Name** :_____(3 points)

Spring: Exam 1

1) Write a Java class that prints the following. (10 points)

```
Hola mundo!
```

2) Write a method named "counter" that takes two integers, A and B, and prints the numbers from A to B. (20 points)

3) Write some Java code that will fill an array with the numbers from 10 to 100. (20 points)

4) Write a method named "average" that will return the average value of an integer array.
It should return a double. (20 points)

5) Draw the truth table for OR and XOR. (10 points)

6) Write a method for the XOR operator named "xor". It should take two booleans as arguments and return a boolean. (20 points)

7) Explain how to compile and run a program "hello.java" from the command line. (10 points)

3) Draw the output of the following program. (20 points)

```
from graphics import *


win=GraphWin()
win.setCoords(-10,-10,10,10)


for i in range(1,6):
    circ=Circle(Point(i,i),(2**0.5) * i)
    rec=Rectangle(Point(-i,-i),Point(0,0))
    t = Text(Point(-5,9-i), "yo")
    circ.draw(win)
    rec.draw(win)
    t.draw(win)
```

4) Perform the following conversions. (10 points each)

a. Convert the Base5 number 432 to Base10.

b. Convert the binary number 1010001 to Base10.

c. Convert the Base10 number 532 to Base5.