CSCI 182 Spring 2020, Test 1
Tuesday, 3 March, 2020

Directions: Please read carefully and answer each problem on the test. You may use the Processing program, Processing reference, anything on of linked from our CSCI 182 course webpage, your notes, and the textbook. You cannot earn credit for the Write Code problem without submitting a completed paper test. You can earn up to 100 points. You have 100 minutes to complete this exam.

True/False: Circle either **T** for True or **F** for False, on each problem. If everything stated in the problem is completely true, circle **T**. If anything stated in the problem is false, circle **F**. (4 problems. 5 points each. 20 points total.)

T F The appropriate type for storing 6650570201, the number of views for Despacito, is the `int`. **Much too big for an int.**

T F The following statement is legal Processing code.

```
char euro = '€' ;
```

Unicode is OK

T F The * operator has an higher precedence than the / operator in Processing. **They have the same precedence.**

T F The value of the expression `5/2 == 2.5` is `true` in Processing. **5/2 is zero due to integer division.**

Multiple Choice: Circle the single best answer to each problem. (2 problems. 5 points each. 10 points total.)

In the first step of compilation, the Processing compiler turns Processing Source Code into

A) Java Source Code
B) Java Byte Code
C) Processing Byte Code
D) Python Source Code

How many pixels in a default sized display window (100 by 100) are visibly colored black by nested loop shown below?

```
for (int j = 0; j < 100; j = j + j) {
    point(j, j) ;
}
```

A) 7
B) 8
C) 50
D) none, the loop gets "stuck" j will always be zero.

Fill In the blank: Write in each blank words to make the statements true. Answers are case-sensitive. (5 blanks. 6 points per blank. 30 points total.)

Let's say you want to use an arc to display the bottom side of a circle. The start angle you would use is ___**0**____, and the stop angle you would use is ___**PI**___. As an illustration, the desired display window is shown below.



Suppose your program is using the color mode `colorMode(HSB,360,100,100)`, the default of HSB. (`colorMode(HSB) also uses the default HSB color mode.`)Write the color components in the blank below to set the fill color to a bright yellow.

```
Fill(___60___, 100, 100);  // or something close to 60
```

Suppose you wanted to initialize an array P containing two integers so that P[0] is 182 and P[1] is 201. What would you put in the following blanks.

```
int ___[] P____ = ____{182, 201}_____ ;
```