Section __D__   Name __Neil__   Time _____

1. Define those variables with correct type of data.

__int__   count = 1;

__char__   letter = 'a' ;

__float__   x = 4.0 ;

__float__   d = 132.32;

__boolean__ happy = false ;

2. Consider a grading system where numbers are turned into letters. Fill in the blank in the following code to complete the boolean expression.

float grade = random(0, 100) ;

if (___grade >= 80___) {

        println (" Assign letter grade A. ") ;

} else if (___grade >= 70___) {

        println (___Assign letter grade B___) ;

} else if (___grade >= 60___) {

        println (___Assign letter grade C___) ;

} else if (___grade >= 50___) {

        println (___Assign letter grade D___) ;

} else if (___grade < 50___) {

        println (___Assign letter grade F___) ;

}

3.

```
int x = 5 ;                                    int x = 5 ;

if ( x == 5 ) {                                if ( x == 5 ) {

        x = 6 ;                                        x = 6 ;

}                                              } else if  ( x== 6 ) {

if ( x == 6 ) {                                        x = 5;

        x = 5 ;                                }
}
println ( " X is now: " + x ) ;                println ( " X is now: " + x ) ;
```

OUTPUT : ___5___   OUTPUT : ___6___

4. Draw a series of lines moving down the screen.

```
int endY ;

void setup ( ) {

        size ( 200 , 200 ) ;

        frameRate ( 5 ) ;

        endY = ___200___ ;

}

void draw ( ) {

        background ( 0 ) ;

        for ( int y = ___0___ ; ___y <= 200___ ; ___y++___ ) {

                stroke ( 255 ) ;

                line ( 0 , y , width , y ) ;

        }

}
```

5. Create a 'sum' function that adds 3 numbers and print the result to the message window once.

```
void setup ( ) {

        int r = sum(a,b,c);
        println(r);                              ;
}

void draw ( ) {


                                                 ;

}

int sum ( _int a_ , _int b_ , _int c_ ) {

        int total = _a_ + _b_ + _c_ ;

        return total ;

}
```