

**Handwritten HW:**

- Must have your name on each page
- Must clearly label the section, e.g "Short Answer" and problem

Exam 1

Bring scantron photo id

**Exam on the 26th**

Half the questions are from chapter 2

We're going to write a complete program on the exam include public class

**purpleRain() method**

The rain looks like lines rotated between 90 - 270 degrees.

Random class is used to "randomize" the rain to appear on the graphics screen

We looked at spooky eyes example program

**spookyEye() method**

The eyes look like 2 vertical ellipses with 2 small circles in the center

It also looks like we are using Random to put the eyes randomly on screen

Color is determined by coordinate by if statements

Yellow eyes in top left, Light Blue(Cyan) on the top right

Green bottom left, Pink

Looked at switch cases in **petFood()** adjusted the code for case c to match case b and I will do the same for case 'a'

```
switch(foodGrade)
{
    case 'a': //ref: pg164 Multi Value case is sam
    case 'A':
        System.out.println("30 cents per lb.");
        break;
    case 'b', 'B':
        System.out.println("20 cents per lb.");
        break;
    case 'c', 'C':
        System.out.println("15 cents per lb.");
        break;
    default:
        System.out.println("Invalid choice.");
}
```

After running this I realized I did this wrong and each case statement should be labeled individually on a separate line like case 'a':

We looked at the squares method and commented out the if statement and put our own switch statement

### **squares()**

I made a mistake where I was putting the integer in quotations " when I can just leave it as a number

```

switch(number)
{
    case '1':
    case '2':
    case '3':
        table.setPenColor(Draw.BLACK);
        break;
    case '4':
    case '5':
    case '6':
        table.setPenColor(Draw.BLUE);
        break;
}

```

This works just like the if statement!

```

125 switch(number)
126 {
127     case 1:
128     case 2:
129     case 3:
130         table.setPenColor(Draw.BLACK)
131         break;
132     case 4:
133     case 5:
134     case 6:
135         table.setPenColor(Draw.BLUE);
136         break;
137     case 7:
138     case 8:
139     case 9:
140         table.setPenColor(Draw.RED);
141         break;
142     default:
143         table.setPenColor(Draw.BLUE);
144 }

```

The **var** keyword is another way of telling java to assign the variable its own variable type depending on what is inputted but this has limitations.

```
var age = 12;  
var gpa = 3.45;  
var city = "San Antonio, Texas, USA";  
age  
    12 (int)  
gpa  
    3.45 (double)  
city  
    "San Antonio, Texas, USA" (String)
```

There are some limitations

```
var height = 12.3, width = 0.24, area;  
    Error: Could not determine variable type  
var height = 12.3, width = 0.24;  
    Error: 'var' is not allowed in a compound declaration  
var weight;  
    Error: Could not determine variable type
```

Cannot declare multiple variables unlike double

Double height = 12.3, width = 0.24;

Needs to be assigned a value to determine what it is

We looked at printf() in speedConverter()

### **speedConverter()**

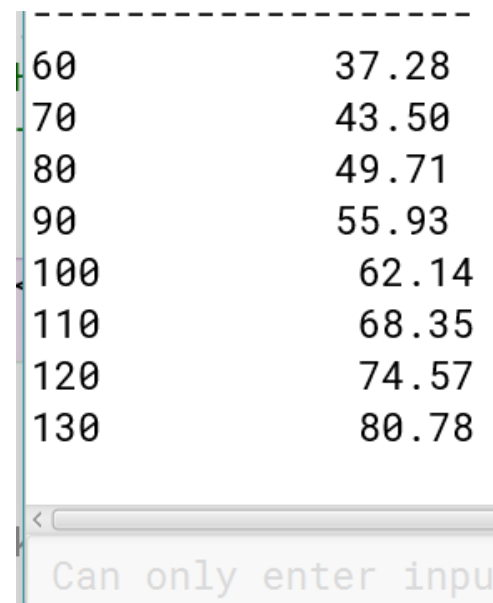
```
System.out.printf("%d          %.2f\n", kph, mph);
```

% D means whole number and if there was a number

– %3d then that would insert 3, followed by spaces,

– %.2f means that it wants a decimal number

– \n is newline



60	37.28
70	43.50
80	49.71
90	55.93
100	62.14
110	68.35
120	74.57
130	80.78

Started on purpleRain didnt finish

This is my spooky eyes. I got the color right but couldnt size the eyes correctly

