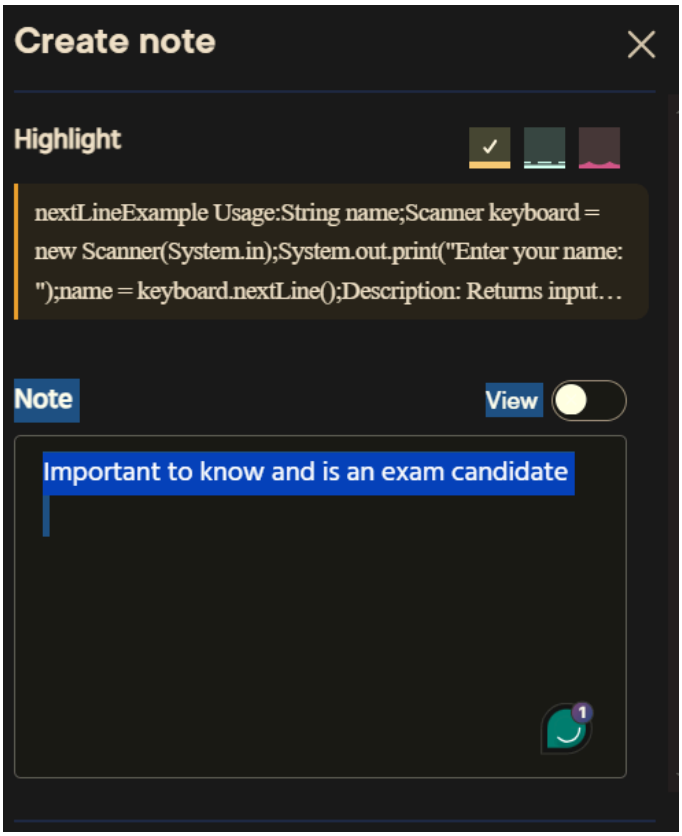
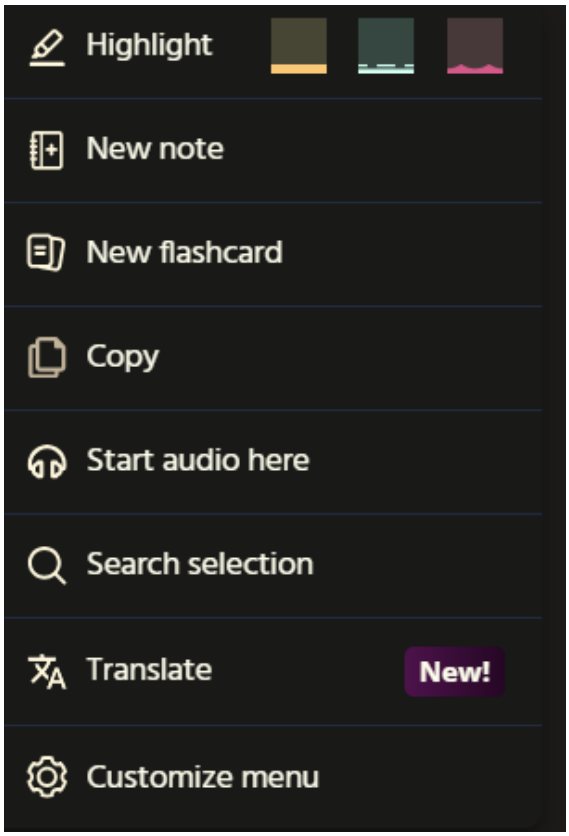
We went over a question of where we got the Scanner Class and it was on Page 109





Highlight text then click on new note to keep track of it on the book.

New Materials:
First Exam 9/26 Thursday

- Multiple Choice / TF / Fill in the blank on Scnatron and hand written code.
- With the additional class meetings we can include Ch03 Decision into the exam.
- You must provide Photo ID for your exam.
- No electronics, all closed book

Studying from the eBook

- Hightlights
- sNotes
- Flashcards

- Checkpoints: MC, Matching
- Animated Solutions

System.out.printf method // use this to print out numbers with only 2 decimals
String.format method

Module 03

Reading Materials has 03_8e_Deision1.pdf up to pg 11
Here we show how to declare primitive data and Class data:

```
String sis = new String("Lil");
String dad = new String("Joe");
int sisAge = 12;
int dadAge = 45;
double sisHt = 4.08;
double dadHt = 6.5;
```

How do you use this data:
You can find the average age, find the average height
What about String data?

Using the String Method Examples

NOTE: Using the method .toUpperCase() makes the string upper case but
Does not change the value of the variable dad

```
dad.toUpperCase()
"JOE"   (String)

Dad                // dad is still lowercase because it was not
assigned
"Joe"   (String)   // the variable of dad becoming uppercase

dad = dad.toUpperCase(); // This is how you assign dad as uppercase
```

```
dad
"JOE"   (String)

dad = dad.toLowerCase(); // This is how you assign dad as uppercase




dad
"joe"   (String)
```

Sports team // I don't really know sports

```
String bl = new String("Boston Lakers");
bl
"Boston Lakers"   (String)
bl.length()
13   (int)

bl.substring (0,3)
"Bos"   (String)

bl.substring (4,8)
"on L"   (String)

bl.substring (8,8) // This is past the scope of String so it returns a
blank
""   (String)

bl.indexOf("or")
-1   (int)       // There is no or next to each other so I assume it
returned      //a value that shows it did not work

bl.indexOf("on")
4   (int)
```

The Random and Methods. The lib has to be imported.

```
Import java.util.Random;
Random rnd = new Random(); // Creates variable rnd (doesn't have to be rnd)
rnd.nextInt()
-1808792012   (int)

rnd.nextInt(500)
11   (int)

rnd.nextInt(5)
4   (int)

rnd.nextInt(5)
1   (int)

rnd.nextInt(500)
185   (int)

rnd.nextDouble(500)
258.3160529798574   (double)

rnd.nextFloat()
0.62484133   (float)
```

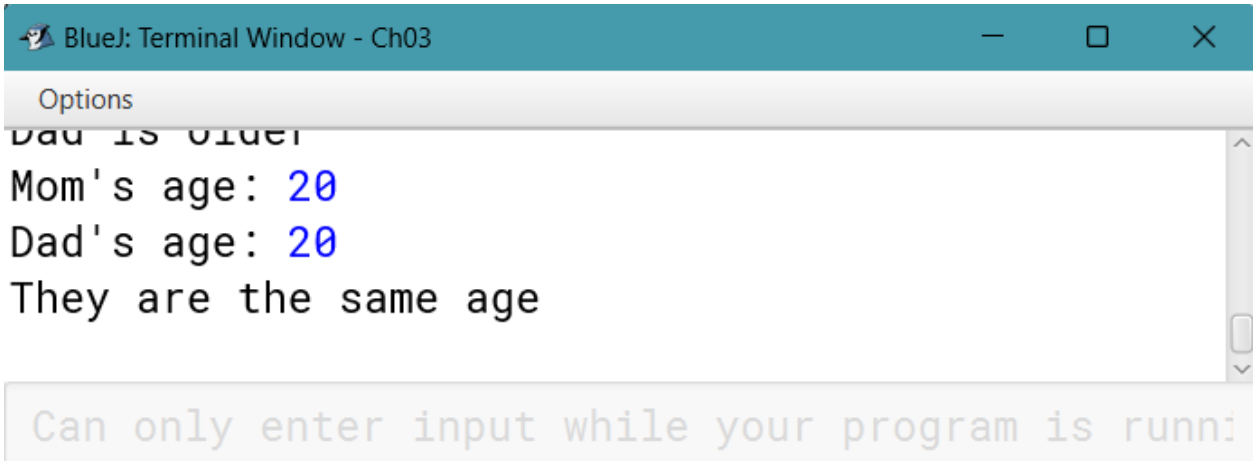
The Draw Class and methods. The lib is through preferences.
The Scanner Class and methods. THe lib has to be imported.

We went over Ch.03a_Yname file which had examples of If/else Statements

```
18      // Explain: This code is trying to get mom's and dad's age from
19      // the keyboard, but is hardcoded in so we have to change that
20
21      // The code wants to print who is older and each of their ages
22      // but prints blank because they are the same right now
23      public static void ifMomDad()
24      {
25          Scanner keyboard = new Scanner(System.in);
26          int momAge, dadAge;
27          System.out.print("Mom's age: ");
28          momAge = keyboard.nextInt();
29
30          System.out.print("Dad's age: ");
31          dadAge = keyboard.nextInt();
32
33          if( momAge > dadAge )
34          {
35              System.out.println("Mom is older");
36          }
37          if( dadAge > momAge )
38          {
39              System.out.println("Dad is older");
40          }
41          // What if they are same age?
```

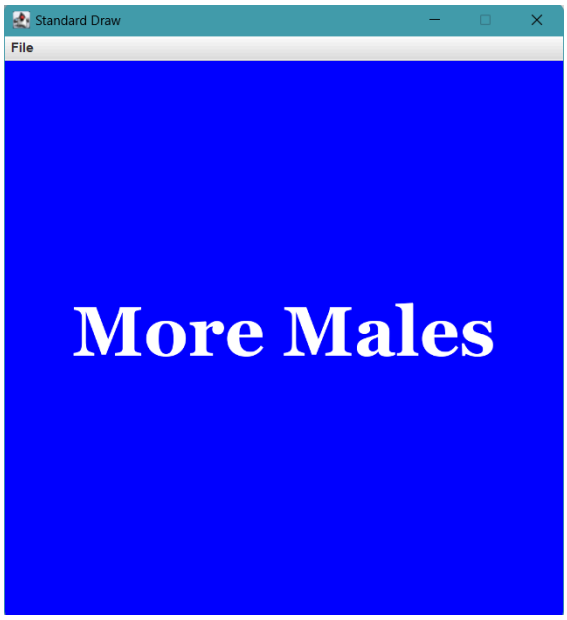
Checks their age

This is what happens when they are the same age



This is from Example 03. I set a scale and filled in a screen

```
74          Draw win = new Draw();
75          win.clear(Draw.LIGHT_GRAY);
76          Font fnt = new Font("Arial", Font.BOLD, 64);
77          win.setFont( fnt );
78          win.setXscale(400,0);
79          win.setYscale(0,400);
80          if(numMale > numFemale)
81          {
82              win.clear(Draw.BLUE);
83              fnt = new Font("Georgia", Font.BOLD, 64);
84              win.setPenColor(Draw.WHITE);
85              win.setFont(fnt);
86              win.text(200, 200, "More Males", 0);
87          }
88          else
89          {
90              win.clear(Draw.PINK);
91              fnt = new Font("Georgia", Font.BOLD, 64);
92              win.setPenColor(Draw.WHITE);
93              win.setFont(fnt);
94              win.text(200, 200 ," More Females", 0);
95          }
```



This is the graphics screen results of each if else statement