## Lesson 3: Grade Calculator!

## Topics covered in this class:

1. Generating random numbers.
2. Using if () and else\{\} statements.
3. Using int, boolean, and String variables

## Task:



Make a program that calculates a student's letter grade (A, B, C, etc.), from a percentage (0\%-100\%).

- Every time you start the app, a random percentage should be turned into its equivalent letter grade.
- The calculated grade should then be displayed on the screen.


## Breakdown of steps:

1. Write code to get a random number from 0 to 100 and store this number using a variable.
2. Use if () and else\{\} statements to calculate the letter grade, depending on what the random number is. Use a string variable to store the grade

An incomplete section of the code is shown below. in the example, percentage is the variable storing the student's test results:

```
if(percentage >= 90) {
    //display grade "A"
}
else if(percentage >= 70) {
    //display grade "B"
}
...
```

| $\%$ | Grade |  |
| :---: | :---: | :---: |
| $90-100$ | A |  |
| $70-89$ | B | Pass |
| $50-69$ | C |  |
| $40-49$ | D |  |
| $20-39$ | E | Fail |
| $0-19$ | F |  |

3. Copy the code above and continue the code to include every possible letter grade (A-F). Use the table above to help you.

## If you're finished early:

- Write code to determine whether the student has passed or failed their exam, depending on their grade. Use a boolean variable to store the grade

