- Test driven development : figuring out what data to use to test our code.

- Test the program before it’s finished, test piece by piece.

- The structure of a Java program:

- Start w/ file comments

- Import statements/ Package statements (here’s this piece of the Java library I want to use, I must call it out.)

- We must always be in a class.

- public Class (start with a capital letter: Pascal letters)

- Always enclose our class in curly braces.

- main: means this is where my program starts. “The first thing that happens.” This will also be enclosed in curly braces.

- Then we will execute every line of code within the main.

-Public static void main(String[] args) does not have a semicolon because its not the end of something. It is not the end of the structure. The end of it is actually the closing curly bracket.

- *System.out.println(“Hello World!”);*

*Int numStudents = 41; // this is a declaration*

*-* The variable is a place in memory. The name of the variable tells the compiler where in memory the data is.

- Keep the code simple and understandable.

- Start with a lowercase letter or an underscore. (legal)

- We cannot use keywords. (legal)

- Variable names are camel case (convention).

- Avoid abbreviations that are confusing. Avoid cryptic names so that they’re understandable.

- We should generally use nouns.

- We need to declare variables before we use them. It lets Java know what type of data is used. We can (optionally) set an initial value.

*Int = variableName;*

double priceCheesePizzas;

char maritalStatus;

char middleInitial;

double salesTaxRate;

int numClassesTaken;

boolean hasTakenGlobalStudies;