

CH 1

Java Coding Styles:

- Classes: CapitalLetters
- Variables: lowerCaseLetters
- Instance variables (class-level data) should be marked private
 - Local variables must be initialized before use
- Equality
 - `==` checks for equality of int, Boolean, or char, but nothing else
 - `.equals()` method for objects
 - `if(input.equalsIgnoreCase("Kendra")){ System.out.println("Correct!"); }`
 - Double must be approximately equal
 - `Math.abs(v1 – v2) <= tolerance`
- If statements
 - `If (condition) { //statement }`
 - `If (age>18){System.out.println("You can vote!");`
- Loops
 - While Loops
 - `while (condition) { //do stuff }`
 - `while (answer.equalsIgnoreCase("Y")){System.out.println("Looping is fun");`
 - Do-While
 - `do { //stuff} while (condition);`
`do {`
`printMenu();`
`choice = scanner.nextInt();`
`doAction(choice);`
`} while (choice != QUIT_OPTION);`
 - for loops

```
public void printLoop() {
    for (int x = 2; x <= 10; x++) {
        for (int i = 1; i <= 10; i++) {
            System.out.print(i * x + "\t");
        }
        System.out.println();
    }
}
```
- Methods
 - `Public void methodName() { // stuff in here };`
- Conditionals
 - `&&` = and , `||` = or, `!` = not
- Switch
 - `switch (num) { case 4: System.out.println("A"); break; case 3: System.out.println("B"); break;`
- Scanner (make scanner object: `Scanner myScanner = new Scanner(System.in);`)