



Name(s): \_\_\_\_\_

Date: \_\_\_\_\_

1. Form a group of less than five people.
2. Create at least one Java file that:
  - a. Unit 1: Primitive Types
    - i. Uses `System.out.print()` or `System.out.println()`.
    - ii. Uses string literals.
    - iii. Uses the primitive types `int`, `double`, and `boolean`.
    - iv. Uses reference types.
    - v. Uses a `final` variable.
    - vi. Uses all arithmetic operations (`+`, `-`, `*`, `/`, `%`).
    - vii. Uses casting.
    - viii. Uses `Integer.MIN_VALUE` or `Integer.MAX_VALUE`.
  - b. Unit 2: Using Objects
    - i. Uses objects with `private` attributes (fields, properties).
    - ii. Uses constructors with formal parameters.
    - iii. Passes actual parameters.
    - iv. Uses overloaded constructors.
    - v. Constructs objects with the keyword `new`.
    - vi. Uses the keyword `null`.
    - vii. Includes at least one zero-parameter method.
    - viii. Uses at least one non-static method.
    - ix. Uses at least one `void` method (excluding the `main` method).
    - x. Includes methods with parameters.
    - xi. Uses method overloading.
    - xii. Uses non-void methods.
    - xiii. Concatenates Strings.
    - xiv. Concatenates Strings and primitives.
    - xv. Uses an escape sequence (`\`, `\\`, or `\n`).
    - xvi. Includes a `toString()` method.
    - xvii. Uses at least one of the following `String` methods:
      1. `length()`
      2. `substring()`
      3. `indexOf()`
      4. `equals()`
      5. `compareTo()`
    - xviii. Uses at least one `static` method (excluding the `main` method).
    - xix. Uses the `Math` methods:
      1. `abs()`
      2. `pow()`
      3. `sqrt()`
      4. `random()`
  - c. Unit 3: Boolean Expressions and `if` Statements
    - i. Uses at least one relational operator (`==`, `!=`, `>`, `<`, `>=`, `<=`)
    - ii. Uses `if` statements.
    - iii. Uses `else` statements.
    - iv. Uses at least one logical operator (`!`, `&&`, `||`)