CSE 142 Midterm
Cheat Sheet

```
for (initialization; test; update) {
    statement(s);
}
```

```
public static void name(parameters) {
    statement(s);
}
```

```
if (test) {
    statement(s);
} else if (test) {
    statement(s);
} else {
    statement(s);
}
```

```
public static type name(parameters) {
    statement(s);
    ...
    return expression;
}
```

```
while (condition) {
    statement(s);
}
```

```
Scanner console = new Scanner(System.in);
Random r = new Random();
```

Math Method	Description
Math.abs(value)	absolute value
Math.min(v1, v2)	smaller of two values
Math.max(v1, v2)	larger of two values
Math.round(value)	nearest whole number
Math.sqrt(value)	square root
Math.pow(b, e)	base to the exponent power

Scanner Method	Description
nextInt()	reads/returns input as int
nextDouble()	reads/returns input as double
next()	reads/returns input as String

Random Method	Description
nextInt(max)	random integer from 0 to max-1

String Method	Description
contains(str)	true if this string contains the other's characters inside it
endsWith(str), startsWith(str)	true if this string starts/ends with the other's characters
equals(str)	true if this string is the same as str
equalsIgnoreCase(str)	true if this string is the same as str, ignoring capitalization
indexOf(str)	index in this string where given string begins (-1 if not found)
length()	number of characters in this string
substring(i, j)	characters in this string from index i (inclusive) to j (exclusive)
substring(i)	characters in this string from index i (inclusive) to end
toLowerCase(), toUpperCase()	a new string with all lowercase or uppercase letters
charAt(i)	returns char at index i