# CS569 - Special Topics in Computer Science

## Assignment 1

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## II. Syntax errors

**[ b. ]**

```java
public class Helo
{
    public static void main (String[] args)
    {
        System.out.println ("Hello, World!");
    }
}
```

**Answer**
Error:(6, 8) java: class Helo is public, should be declared in a file named Helo.java

**[ c. ]**

```
"D:\Program Files\Java\bin\java.exe" "-
Helo, World!

Process finished with exit code 0
```

**Answer**
The propram succeeded to compile because there's no syntax error. Only the string printed got changed.

**[ d. ]**

```java
public class Hello
{
    public static void main (String[] args)
    {
        System.out.println ("Hello, World!);
    }
}
```

**Answer**

Error:(13, 42) java: unclosed string literal

**[ e. ]**

```
public class Hello
{
    public static void main (String[] args)
    {
        System.out.println (Hello, World!");
    }
}
```

**Answer**

Error:(13, 41) java: ')' expected

Error:(13, 42) java: unclosed string literal

**[ f. ]**

```
public class Hello
{
    public static void main (String[] args)
    {
        System.out.println ("Hello, World!")
    }
}
```

**Answer**

Error:(10, 45) java: ';' expected

# V. Two Meanings of Plus

**[ c. ]**

The last three statements:

8 plus 5 is 85

8 plus 5 is 13

13 equals 8 plus 5.

**Answer**

1. There are no parentheses so the expression is evaluated left to right. For the first operator, one operand is a string, the other is an integer. So the '+' is the concatenation operator. For the second operator, the operand before has been converted to a string, in this way, the second '+' should also be the concatenation operator.

2. With parentheses inside, the second '+' should be evaluated preferentially. So the second '+' is an ordinary addition, while the first '+' should be the concatenation operator.

3. There are no parentheses so the expression is evaluated left to right. For the first '+', both operands are integers, and it should be an ordinary addition operator. For the Second '+', one of the operands is a string, so it is a concatenation operator.

**[ d. ]**

```java
System.out.println ("The first computer was invented about " + 55 +
                " years ago.");
```

**Answer**

Add spaces to strings which are adjacent to the integer, like this:

```
"D:\Program Files\Java\bin\java.exe" "-javaagent:D:\Windows
This is a long string that is the concatenation of two shor
The first computer was invented about 55 years ago.
8 plus 5 is 85
```