Lecture 4

- Topics Covered
  - if
  - if-else
  - switch
if statement syntax

```java
if (boolean_expression){
    statement_1;
    statement_2;
    ...
    statement_n
}
```
if-else statement syntax

```c
if (boolean_expression)
    statement_list_1
else
    statement_list_2
```
Dangling Else Ambiguity

if (x < 3)
if (y > 2)
    System.out.println(“Lions”);
else
    System.out.println(“Tigers”);

• Does the else go match with the outer or inner if clause?
switch syntax

```
switch (switch-expression){
    case casevalue_1: statement;
        statement;
        ....
        break;
    case casevalue_2: statement;
        statement;
        ....
        break;
    ... case casevalue_n: statement;
        statement;
        ....
        break;
    default: statement;
        statement;
        ...
}
```

- switch-expression must evaluate to an integer or character
- case values must be constants
- **break** is optional without the **break**, next case will be executed
Exercise

• Write a program that takes in as input a sequence the number of pins knocked down in a game of bowling (tenpen). Output each frame and the number of pins hit for each try within a frame. After a summary of all frames have been printed, print the final score.