Lab06: Rock Paper Scissors

Introduction:

In today's lab, you will create a simple Rock Paper Scissors game by using some selection statements.

Setup:

Before coding, you will need to set up your working directory. Open the terminal and go into your cs180 directory. Inside the cs180 directory, create the lab06 directory for this lab assignment.
For example, assume you are in your home directory(/homes/your_login):

```
% cd cs180
% mkdir lab06
% cd lab06
% drjava
```

File:

Get the skeleton code file lab06.java from the link provided by your lab TA.

Steps:

1. The program will first output a menu with 3 options(Rock/Paper/Scissors). You will need to use a scanner to get the option which is selected by the player. Then the program will simulate the choice of the second player by select randomly one from these 3 options(Rock/Paper/Scissors).

Hint: To implement the random selection, you can simply generate a random integer from 1 to 3. If this random integer is equal to 1, you can assume the AI selects Rock.

2. The program will compare the options selected by the player and AI and output the result. If you are not clear about the rules about Rock Paper Scissors game, refer to http://en.wikipedia.org/wiki/Rock-paper-scissors .
The one who wins in the current round will earn one point. There are totally 9 cases.

Player	AI	Winner	Player Score	AI Score
Rock	Rock	Tie	0	0
Rock	Paper	AI	0	+1
Rock	Scissors	Player	+1	0

Paper	Rock	Player	+1	0
Paper	Paper	Tie	0	0
Paper	Scissors	AI	0	+1
Scissors	Rock	AI	0	+1
Scissors	Paper	Player	+1	0
Scissors	Scissors	Tie	0	0

3. The program will play 3 rounds with the player and record the total points. At last the program will output who is the final winner.

Sample output:

```
% javac lab06.java
% java lab06

1. Rock
2. Paper
3. Scissors
Select your choice: 1
AI: Paper
Round 1: AI wins

1. Rock
2. Paper
3. Scissors
Select your choice: 1
AI: Scissors
Round 2: Player wins

1. Rock
2. Paper
3. Scissors
Select your choice: 1
AI: Paper
Round 3: AI wins
```

```
Player vs. AI: 1 vs. 2
Winner is AI!
```

Turn In:

Before turning in your labs, please remove all class files from your lab06 directory. To do, first verify that you are in the lab06 directory, if you are not in this directory, navigate there now.

$ pwd
/homes/your_login/cs180/lab06

Now remove all class files.
$ rm *.class

Finally move to lab06's parent directory, and submit your code via turnin.
$ cd ..
$ turnin -v -c cs180=**XXX** -p lab06 lab06

Note: the **XXX** stands for your section id. Use the following table to determine it:

Lab Day	Lab Time	Section-id to use in the turnin command
T	**9:30**	**L01**
W	**9:30**	**L03**
W	**11:30**	**LM3**
W	**1:30**	**L02**
F	**11:30**	**LM2**
F	**1:30**	**LM1**
F	**3:30**	**L04**

Grading:

Coding standards	10%
Successful turn-in	10%
Step 1	20%
Step 2	40%
Step 3	20%