

## Ancient African Bowling

Recent research in the field of African archeology have uncovered the rules of an ancient game whose rules here follow (strangely similar to bowling!)

- Players must throw a piece of wood in the direction of 15 bowling pins and try to shoot up. For each player, the game breaks down into 5 frames being composed of 3 shots. After each frame, the pins are straightened.
- In one frame, if all 3 shots failed to shoot down all the pins, the pins are counted for each launch, a 14 maximum for a frame.
- If all the pins are shot with the first launch of a frame, it is a strike. If all pins are knocked down, after the 2nd or 3rd run, it is a spare.
- A spare earns 15 points plus the points for the next 2 shots, or maximum 45 if the following 2 shots are strikes.
- A strike earns 15 points plus the points for the next 3 shots, or maximum 60 if the following 3 shots are strikes.
- During a strike or a spare in last frame, the player can make extra shots to allow the calculation of points in the last frame. The fifth frame may be composed of up to four shots.
- The maximum score is 300, also known as a perfect game.

In the examples below:

- The spare is depicted by a slash in the last box of the frame on the score sheet.
- The strike is depicted by a cross in the first box of the frame on the score sheet.
- The last frame has 4 boxes to allow completion of a spare or a strike to this frame, with extra shots.

1			2			3			4			5			
8	1	1	8	/		1	2	1	X			1	2	1	
10			28			31			50			53			

1			2			3			4			5			
X			8	1	2	1	2	/	6	4	1	X	8	2	3
26			37			62			73			101			

The goal is to design a java, javascript, php or python program that computes the scores of this game, and a way to submit data to the program by calling a method of the following type (java sample):

```
/**
 * Gives the result of a player for next launch
 * @param pins gives the number of pins knocked down by the shot
 */
public void shot(int pins);
```