

## 1 Week 1: Python Basics & Foundational Metrics

This code calculates and prints **Possessions** (Pace) and **Offensive Efficiency** based on sample box score data.

```
# Week 1 Assignment – Pace and Offensive Efficiency
```

```
# Step 1: Enter game stats here (Using Celtics Sample Data)
```

```
FGA = 90 # Field Goal Attempts
```

```
FTA = 25 # Free Throw Attempts
```

```
OREB = 12 # Offensive Rebounds
```

```
TO = 14 # Turnovers
```

```
PTS = 115 # Points Scored
```

```
# Step 2: Calculate Possessions
```

```
# Use the coefficient 0.44 for Free Throw Attempts
```

```
possessions = FGA + (0.44 * FTA) - OREB + TO
```

```
# Calculate Offensive Efficiency
```

```
# Add a safety check for division by zero (though unlikely with real game data)
```

```
off_efficiency = (PTS / possessions) * 100 if possessions > 0 else 0
```

```
# Print the results in a clear sentence
```

```
print("The team scored", PTS, "points on", round(possessions, 2), "possessions.")
```

```
print("Offensive Efficiency:", round(off_efficiency, 2)) # Expected: 123.66
```