# Nature Language Processing Term Project Report YIXUN WANG

**TOPIC:** Information Extraction on NBA Scores Reports **Data Corpus:** Yahoo Sports -> NBA -> Scores Reports

Programming Language: JAVA External Library: JET

**Source Code:** NLP/src/nlp/sportsextraction/Main.java

NLP/src/nlp/sportsextraction/ReadingFile.java

NLP-Measure/src/Measure.java

**JET Files:** [Make sure Jet.dataPath in \*.jet file is set correctly]

jet/props/nbaScores.jet

jet/props/point.jet

jet/data/chunkPatternsSP.txt jet/data/scoresPatterns.txt jet/data/sportConcepts.hrc jet/data/pointsPatterns.txt jet/data/scoreConcepts.hrc

# **Input Data and Formation:**

The Data corpus were extracted from Yahoo Sports by hand. There are 57 individual news reports as a whole and most of which contains more than 400 words or 1700 characters on average, that is, for each article it contains the whole report it self, not only a part. However I exclude the report's title, or else I can play a cheat on it since a title usually reflects most of information that I need.

Here is a sample input of two news:

<TEXT>

The content of the first NBA report is here.

</TEXT>

<TEXT>

The content of another NBA report is here.

</TEXT>

## **Training Patterns:**

I use six tenth of the total data corpus to train my events patterns and then place a test on the whole 57 news reports.

There are three major training targets of this project:

## 1) to get the HOME COURT

Luckily enough, I found Yahoo Sports always put the game location at the very beginning, and I can simply extract the rough location information over there and analysis it by comparing it with my database. However, In case of no such a convenience, I would also first get a set of possible location by using location-Pattern, second compare such locations with what I get from TEAM and SCORES Pattern. The TEAM information must be linked with the wanted location so that it's possible to get it correctly.

## 2) to get the TEAM and SCORES

This is one of the main purpose of my project, and there are three kind of informations I need to obtain: WIN-TEAM, LOSE-TEAM and SCORES since these informations are almost always show up together, such as:

"TEAM-A win/beat TEAM-B with SCORES xxx-xxx"

or

"TEAM-A give TEAM-B a loss with SCORES xxx-xxx"

However there are also many more complexed combinations which requires a more careful Pattern construction:

"TEAM-A champions to a SCORES xxx-xxx victory over TEAM-B"

or

"TEAM-A went into the All-Star break with their fourth victory in five games, pounding the TEAM-B SCORES xxx-xxx"

One can define numerous patterns to cover most combinations, my way to break through this question, on the other hand, is that by:

first locating the key cWIN words like WIN or VICTORY

then finding out the corresponding TEAM tag either on both sides or on the same side, and finally take the struct of sentence into consideration.

I can somehow predict TEAMs and SCOREs correctly and efficiently.

My pattern file will be attached to the end of this report.

# 3) to get the PLAYER WITH HIGHEST POINTS

This is trying to get the possible highest POINTS in a given game, and the corresponding PLAYER. Again, there are numbers of different ways of saying:

"PLAYER scored xx POINTS"

For instance, we can say:

"PLAYER was the leading scorer with xx POINTS."

or

"PLAYER scored xx of his season-high xx POINTS."

This time I'm trying to cover these situations carefully and totally with various of patterns.

# What do I do with my JAVA code

- 1) Parsing the text into a set of sentences and store them in proper data structure. This allows me to eliminate sentences that doesn't contains any KEY word like TEAM name or the concept of WIN and LOSE. Notice that, I can not simple separate the whole context by period, because there are names like "D.J. Augustin" also contains "." which requires additional processing.
- 2) Applying JET Pattern Matching on each sentence. There are two kind of Patterns, one for finding out TEAMS and SCORES, the other is for searching a PLAYER and his HIGHEST POINTS. Usually this step will generate a lot of redundant values that leaves to me for further processing.
- 3) Filter redundant informations. for instance, I can make a use of pre-acquired LOCATION to help me choosing the patterns that contains the right TEAMS and SCORES, or I can use my database to eliminate a ENAMEX that doesn't belong to a Person but belong to a TEAM or a LOCATION when I dealing with PLAYER and POINTS information.
- 4) Measure the output and get the Precision & Recall. The standard output of extraction as well as my hand-made evaluation are listed to the end of the report. Each article contains 6 points of informations[LOCATION, WIN-TEAM, LOSE-TEAM, SCORES, PLAYER, POINTS]

so that there are 57\*6 = 342 pieces of informations need to be check. The measurement including a totally Precision and Recall, and for each of the three extraction targets, I also calculated their corresponding Precision and Recall values. Here is the final results:

#### Final results:

HOME COURT: Precision = 1.0 Recall = 1.0

WIN TEAM, LOSE TEAM and SCORES: Precision = 0.9940476190476191 Recall = 0.9766081871345029

PLAYER WITH HIGHEST POINTS: Precision = 0.8807339449541285 Recall = 0.8495575221238938

**OVER ALL MEASURE:** 

Precision = 0.9579579579579 Recall = 0.9382352941176471

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## **JET PATTERN**

socres-1

:= [ENAMEX]:Person ([constit cat=v pa=[head?isa(cScore)]] |

```
[constit cat=vgroup pa=[head?isa(cScore)]])
                             ("a" | "his") pre-score ("of" | "with")?
                             [constit cat=q]:Scores
                             ([constit cat=ngroup pa=[head=point number=plural]] |
                             [constit cat=ngroup pa=[head=apiece]]);
scores0
                      := ([ENAMEX]I[constit cat=ngroup] | "Harden"):Person
                             ([constit cat=v pa=[head?isa(cScore)]] | [constit cat=vgroup
pa=[head?isa(cScore)]]
                             I [constit cat=ven pa=[head?isa(cScore)]])
                             [constit cat=q]:Scores ([constit cat=ngroup pa=[head=point
number=plural]] I
                             [constit cat=ngroup pa=[head=apiece]]);
                      := ([ENAMEX]I[constit cat=ngroup] | "Harden"):Person
scores1
                             ([constit cat=v pa=[head?isa(cScore)]] | [constit cat=vgroup
pa=[head?isa(cScore)]])
                             "with"? ("a" I "his")? pre-score? ("of" I "with")?
                             [constit cat=q]:Scores ([constit cat=ngroup pa=[head=point
number=plural]] I
                             [constit cat=ngroup pa=[head=apiece]]);
//Brian Roberts was the leading scorer with 18 points on Monday.
scores2
                      := ([ENAMEX]|[constit cat=ngroup]):Person [tagger]* ([constit cat=ngroup
pa=[head?isa(cScoreNoun)]] |
                             [constit cat=n pa=[head?isa(cScoreNoun)]]) "with"
                             [constit cat=q]:Scores [constit cat=ngroup pa=[head=point
number=plural]];
//Gerald Henderson put in 17.
scores3
              := ([ENAMEX]I[constit cat=ngroup]):Person "put" "in" ("a" | "his")? pre-score?
"of"? [constit cat=q]:Scores
                             ([constit cat=ngroup pa=[head=point number=plural]] I
                             [constit cat=ngroup pa=[head=apiece]])?;
//Bradley Beal led Washington with 18 points
scores4
                      := ([ENAMEX]I[constit cat=ngroup]):Person "also"? mid?
                             ([constit cat=vgroup pa=[head?isa(cScore)]] | [constit cat=ven
pa=[head?isa(cScore)]] I
                             [constit cat=v pa=[head?isa(cScore)]])
                             [constit cat=ngroup]* "with" "a"? pre-score?
                             [constit cat=q]:Scores [constit cat=ngroup pa=[head=point
number=plural]];
//Damian Lillard, who had 25 points
                      := ([ENAMEX]I[constit cat=ngroup]):Person ","? "who"
scores5
                             ([constit cat=v pa=[head?isa(cScore)]] | [constit cat=vgroup
pa=[head?isa(cScore)]])
                             "with"? ("a" I "his")? pre-score?
```

```
[constit cat=q]:Scores ([constit cat=ngroup pa=[head=point
number=plural]] I
                            [constit cat=ngroup pa=[head=apiece]]);
//Barea scored 15 of his season-high 22 points
scores6
                     := ([ENAMEX]I[constit cat=ngroup]):Person [tagger]*
                            ([constit cat=v pa=[head?isa(cScore)]] | [constit cat=vgroup
pa=[head?isa(cScore)]])
                            [constit cat=q] "of" [tagger]* pre-score? [constit cat=q]:Scores
                            ([constit cat=ngroup pa=[head=point number=plural]] |
                            [constit cat=ngroup pa=[head=apiece]]);
//Luol Deng made 11 of 14 shots and scored 29 points
                     := ([ENAMEX]I[constit cat=ngroup]):Person "made"
scores7
                            [constit cat=q] "of" [constit cat=q] "shots" "and"?
                            ([constit cat=v pa=[head?isa(cScore)]] | [constit cat=vgroup
pa=[head?isa(cScore)]])
                            [constit cat=q]:Scores
                            ([constit cat=ngroup pa=[head=point number=plural]] |
                            [constit cat=ngroup pa=[head=apiece]]);
pre-score := "career" "-" "high" | "season" "-" "high" | "season" "highs" | "career" "highs"
                            I "season" "-" "highs" I "career" "-" "highs";
                     := "," [tagger]+ ",";
mid
                     write "Person: " + Person + " Scores: " + Scores;
//when point
when point
                     add [constit cat=pointevent player=Person points=Scores];
_____
JET PATTERN
scoresPatterns.txt
// Patterns for sport event
//
pattern set score;
score
              := win;
// pattern for win: <TEAM-A> win <TEAM-B>
```

```
:= win-noun | win-noun2 | win-verb | lose-noun | lose-noun2 | lose-noun3 |
win
// TEAM-A cWinNoun TEAM-B
              := (teams):Winteam [tagger]*
win-noun
                             ([constit cat=n pa=[head?isa(cWinNoun)]] |
                             [constit cat=ngroup pa=[head?isa(cWinNoun)]] |
                             "victory" | "demolition" | "beating" | "sweep" | "rout") [tagger]*
                             (teams):Loseteam;
win-noun2
              := (teams):Winteam [tagger]* (teams):Loseteam [tagger]*
                             ([constit cat=n pa=[head?isa(cWinNoun)]] |
                             [constit cat=ngroup pa=[head?isa(cWinNoun)]] |
                             "victory" | "demolition" | "beating" | "sweep" | "rout"):
// TEAM-A cWin TEAM-B
win-verb
              := (teams):Winteam [tagger]*
                             ([constit cat=v pa=[head?isa(cWin)]] | [constit cat=vgroup
pa=[head?isa(cWin)]]
                             I [constit cat=ven pa=[head?isa(cWin)]])
                             [tagger]* "the"? (teams):Loseteam;
// lead TEAM-A to a cWinNoun over TEAM-B
               := "76ers" | "Clippers" | "Portland" | "Kings" | "Hornets" | "Rockets" | "Bucks" |
teams
"Denver" | "Atlanta" | "Boston" | "Brooklyn" | "New York" | "Philadelphia" | "Toronto" | "Chicago" |
"Cleveland" | "Detroit" | "Indiana" | "Milwaukee" | "Charlotte" | "Miami" | "Orlando" | "Washington"
I "Minnesota" I "Oklahoma" I "State" I "Orleans" I "Utah" I "Los Angeles Lakers" I "Phoenix" I
"Sacramento" | "Houston" | "Memphis" | "Dallas" | "San Antonio" | "New Orleans" | "Golden
State" | "OKC" | "POR" | "York" | "Celtics" | "Nets" | "Knicks" | "Cavaliers" | "Pistons" | "Pacers" |
"Heats" | "Hawks" | "Raptors" | "Wizards" | "Nuggets" | "Timberwolves" | "Blazers" | "Jazz" |
"Warriors" | "Thunder" | "Bulls" | "Lakers" | "Suns" | "Grizzlies" | "Mavericks" | "Spurs" |
"Pelicans" | "Bobcats" | "Sixers" | "Heat" | "Magic" | "Antonio";
when teams add [constit cat=ateam];
lose-noun
              := (teams):Winteam [tagger]* (teams):Loseteam [tagger]*
                             ([constit cat=ngroup pa=[head?isa(cLoseNoun)]] I
                             [constit cat=n pa=[head?isa(cLoseNoun)]] |
                             [constit cat=vgroup pa=[head?isa(cLose)]] | "loss");
lose-noun2
              := (teams):Loseteam [tagger]* (teams):Winteam
                             [constit cat=ngroup pa=[head?isa(cWinNoun)]];
lose-noun3
              := (teams):Loseteam [tagger]*
                             ([constit cat=ngroup pa=[head?isa(cLoseNoun)]] I
                             [constit cat=n pa=[head?isa(cLoseNoun)]] |
                             [constit cat=vgroup pa=[head?isa(cLose)]] | "loss")
```

# "to"? "the"? (teams):Winteam;

//when score write "winteam: " + Winteam + " loseteam: " + Loseteam; when score add [constit cat=sportevent winteam=Winteam loseteam=Loseteam];

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### **OUTPUT OF EXTRACTION**

Extraction of Paragraph 1

**HOME COURT: Cleveland Cavaliers** 

WIN TEAM: Cleveland LOSE TEAM: 76ers SCORE: 97-84 PLAYER WITH HIGHEST POINTS: Kyrie Irving SCORED 24 POINTS

Extraction of Paragraph 2

**HOME COURT: Washington Wizards** 

WIN TEAM: Charlotte LOSE TEAM: Wizards SCORE: 92-88
PLAYER WITH HIGHEST POINTS: Cody Zeller SCORED 21 POINTS

Extraction of Paragraph 3

**HOME COURT: New York Knicks** 

WIN TEAM: Nets LOSE TEAM: Clippers SCORE: 102-100 PLAYER WITH HIGHEST POINTS: Brook Lopez SCORED 24 POINTS

Extraction of Paragraph 4 HOME COURT: Detroit Pistons

WIN TEAM: Pistons LOSE TEAM: Heat SCORE: 108-91

PLAYER WITH HIGHEST POINTS: Chris Bosh SCORED 34 POINTS

Extraction of Paragraph 5

**HOME COURT: Portland Trail Blazers** 

WIN TEAM: Portland LOSE TEAM: Jazz SCORE: 103-102 PLAYER WITH HIGHEST POINTS: Hayward SCORED 27 POINTS

Extraction of Paragraph 6

**HOME COURT: Sacramento Kings** 

WIN TEAM: Warriors LOSE TEAM: Kings SCORE: 121-96

PLAYER WITH HIGHEST POINTS: DeMarcus Cousins SCORED 26 POINTS

Extraction of Paragraph 7

**HOME COURT: Los Angeles Clippers** 

WIN TEAM: Denver LOSE TEAM: Nuggets SCORE: 106-96

PLAYER WITH HIGHEST POINTS: Ty Lawson SCORED 32 POINTS

Extraction of Paragraph 8 HOME COURT: Phoenix Suns

WIN TEAM: Rockets LOSE TEAM: Suns SCORE: 127-118

PLAYER WITH HIGHEST POINTS: Eric Bledsoe SCORED 32 POINTS

Extraction of Paragraph 9

**HOME COURT: Charlotte Bobcats** 

WIN TEAM: Detroit LOSE TEAM: Hornets SCORE: 106-78
PLAYER WITH HIGHEST POINTS: Monroe SCORED 23 POINTS

Extraction of Paragraph 10 HOME COURT: Atlanta Hawks

WIN TEAM: Toronto LOSE TEAM: Hawks SCORE: 105-80

PLAYER WITH HIGHEST POINTS: Lou Williams SCORED 26 POINTS

Extraction of Paragraph 11 HOME COURT: Orlando Magic

WIN TEAM: Magic LOSE TEAM: Pelicans SCORE: 95-84
PLAYER WITH HIGHEST POINTS: Victor Oladipo SCORED 22 POINTS

Extraction of Paragraph 12 HOME COURT: Milwaukee Bucks

WIN TEAM: Bucks LOSE TEAM: Denver SCORE: 89-81

PLAYER WITH HIGHEST POINTS: Wilson Chandler SCORED 19 POINTS

Extraction of Paragraph 13

**HOME COURT: Sacramento Kings** 

WIN TEAM: Spurs LOSE TEAM: Kings SCORE: 107-96

PLAYER WITH HIGHEST POINTS: McLemore SCORED 21 POINTS

Extraction of Paragraph 14

**HOME COURT: Portland Trail Blazers** 

WIN TEAM: Portland LOSE TEAM: Thunder SCORE: 115-112 PLAYER WITH HIGHEST POINTS: Westbrook SCORED 39 POINTS

Extraction of Paragraph 15 HOME COURT: Chicago Bulls

WIN TEAM: Chicago LOSE TEAM: Timberwolves SCORE: 96-89 PLAYER WITH HIGHEST POINTS: Jimmy Butler SCORED 28 POINTS

Extraction of Paragraph 16 HOME COURT: Detroit Pistons

WIN TEAM: York LOSE TEAM: Detroit SCORE: 121-115
PLAYER WITH HIGHEST POINTS: Monroe SCORED 28 POINTS

Extraction of Paragraph 17
HOME COURT: Houston Rockets

WIN TEAM: Houston LOSE TEAM: Nets SCORE: 102-98
PLAYER WITH HIGHEST POINTS: Jones SCORED 26 POINTS

Extraction of Paragraph 18 HOME COURT: Chicago Bulls

WIN TEAM: Charlotte LOSE TEAM: Chicago SCORE: 98-86 PLAYER WITH HIGHEST POINTS: Gasol SCORED 25 POINTS

Extraction of Paragraph 19 HOME COURT: Orlando Magic

WIN TEAM: Heat LOSE TEAM: Magic SCORE: 93-90

PLAYER WITH HIGHEST POINTS: Luol Deng SCORED 21 POINTS

Extraction of Paragraph 20 HOME COURT: Atlanta Hawks

WIN TEAM: Hawks LOSE TEAM: Mavericks SCORE: 104-87 PLAYER WITH HIGHEST POINTS: Monta Ellis SCORED 19 POINTS

Extraction of Paragraph 21 HOME COURT: Boston Celtics

WIN TEAM: Celtics LOSE TEAM: Knicks SCORE: 115-94

PLAYER WITH HIGHEST POINTS: Jonas Jerebko SCORED 20 POINTS

Extraction of Paragraph 22

**HOME COURT: New Orleans Pelicans** 

WIN TEAM: Orleans LOSE TEAM: Nets SCORE: 102-96

PLAYER WITH HIGHEST POINTS: Tyreke Evans SCORED 15 POINTS

Extraction of Paragraph 23

HOME COURT: Houston Rockets

WIN TEAM: Houston LOSE TEAM: Clippers SCORE: 110-105 PLAYER WITH HIGHEST POINTS: Harden SCORED 21 POINTS

Extraction of Paragraph 24

**HOME COURT: Milwaukee Bucks** 

WIN TEAM: Milwaukee LOSE TEAM: Philadelphia SCORE: 104-88 PLAYER WITH HIGHEST POINTS: John Henson SCORED 21 POINTS

Extraction of Paragraph 25

**HOME COURT: Minnesota Timberwolves** 

WIN TEAM: Minnesota LOSE TEAM: Washington SCORE: 97-77 PLAYER WITH HIGHEST POINTS: Kevin Martin SCORED 28 POINTS

Extraction of Paragraph 26 HOME COURT: Denver Nuggets

WIN TEAM: Phoenix LOSE TEAM: Nuggets SCORE: 110-96 PLAYER WITH HIGHEST POINTS: Bledsoe SCORED 18 POINTS

Extraction of Paragraph 27

HOME COURT: Utah Jazz

WIN TEAM: Lakers LOSE TEAM: Jazz SCORE: 100-97

PLAYER WITH HIGHEST POINTS: Clarkson SCORED 22 POINTS

Extraction of Paragraph 28

**HOME COURT: Sacramento Kings** 

WIN TEAM: Kings LOSE TEAM: Grizzlies SCORE: 102-90 PLAYER WITH HIGHEST POINTS: Rudy Gay SCORED 28 POINTS

Extraction of Paragraph 29

**HOME COURT: Portland Trail Blazers** 

WIN TEAM: Portland LOSE TEAM: Spurs SCORE: 111-95

PLAYER WITH HIGHEST POINTS: Matthews SCORED 31 POINTS

Extraction of Paragraph 30

**HOME COURT: Cleveland Cavaliers** 

WIN TEAM: Cleveland LOSE TEAM: Warriors SCORE: 110-99

PLAYER WITH HIGHEST POINTS: James SCORED 42 POINTS

Extraction of Paragraph 31 HOME COURT: Phoenix Suns

WIN TEAM: Suns LOSE TEAM: Thunder SCORE: 117-113
PLAYER WITH HIGHEST POINTS: Westbrook SCORED 39 POINTS

Extraction of Paragraph 32 HOME COURT: Miami Heats

WIN TEAM: Heat LOSE TEAM: 76ers SCORE: 119-108 PLAYER WITH HIGHEST POINTS: Dragic SCORED 23 POINTS

Extraction of Paragraph 33

**HOME COURT: New Orleans Pelicans** 

WIN TEAM: Orleans LOSE TEAM: RaptorsSCORE: 100-97

PLAYER WITH HIGHEST POINTS: Omer Asik SCORED 14 POINTS

Extraction of Paragraph 34 HOME COURT: Chicago Bulls

WIN TEAM: Bulls LOSE TEAM: Bucks SCORE: 87-71

PLAYER WITH HIGHEST POINTS: Tony Snell SCORED 20 POINTS

Extraction of Paragraph 35

**HOME COURT: Houston Rockets** 

WIN TEAM: Houston LOSE TEAM: Timberwolves SCORE: 113-102 PLAYER WITH HIGHEST POINTS: Harden SCORED 31 POINTS

Extraction of Paragraph 36 HOME COURT: Denver Nuggets

WIN TEAM: Nets LOSE TEAM: Nuggets SCORE: 110-82
PLAYER WITH HIGHEST POINTS: Danilo Gallinari SCORED 22 POINTS

Extraction of Paragraph 37 HOME COURT: Phoenix Suns

WIN TEAM: Boston LOSE TEAM: Suns SCORE: 115-110 PLAYER WITH HIGHEST POINTS: Thomas SCORED 21 POINTS

Extraction of Paragraph 38 HOME COURT: Utah Jazz

WIN TEAM: Jazz LOSE TEAM: Spurs SCORE: 90-81 PLAYER WITH HIGHEST POINTS: He SCORED 7 POINTS

Extraction of Paragraph 39

**HOME COURT: Los Angeles Clippers** 

WIN TEAM: Grizzlies LOSE TEAM: Clippers SCORE: 90-87 PLAYER WITH HIGHEST POINTS: Paul SCORED 30 POINTS

Extraction of Paragraph 40

**HOME COURT: Charlotte Bobcats** 

WIN TEAM: Thunder LOSE TEAM: HornetsSCORE: 110-103 PLAYER WITH HIGHEST POINTS: ??? SCORED ??? POINTS

Extraction of Paragraph 41 HOME COURT: Miami Heats

WIN TEAM: Pelicans LOSE TEAM: Heat SCORE: 105-91

PLAYER WITH HIGHEST POINTS: Eric Gordon SCORED 24 POINTS

Extraction of Paragraph 42 HOME COURT: Chicago Bulls

WIN TEAM: Chicago LOSE TEAM: Suns SCORE: 112-107

PLAYER WITH HIGHEST POINTS: Pau Gasol SCORED 22 POINTS

Extraction of Paragraph 43

**HOME COURT: Houston Rockets** 

WIN TEAM: ??? LOSE TEAM: ??? SCORE: ???

PLAYER WITH HIGHEST POINTS: James Harden SCORED 20 POINTS

Extraction of Paragraph 44

**HOME COURT: Los Angeles Clippers** 

WIN TEAM: Clippers LOSE TEAM: Kings SCORE: 126-99

PLAYER WITH HIGHEST POINTS: Austin Rivers SCORED 28 POINTS

Extraction of Paragraph 45 HOME COURT: Orlando Magic

WIN TEAM: Orlando LOSE TEAM: Knicks SCORE: 89-83

PLAYER WITH HIGHEST POINTS: Nik Vucevic SCORED 28 POINTS

Extraction of Paragraph 46 HOME COURT: Boston Celtics

WIN TEAM: Celtics LOSE TEAM: Hawks SCORE: 89-88

PLAYER WITH HIGHEST POINTS: AI Horford SCORED 22 POINTS

Extraction of Paragraph 47 HOME COURT: Detroit Pistons

WIN TEAM: Antonio LOSE TEAM: Pistons SCORE: 104-87

PLAYER WITH HIGHEST POINTS: D.J. Augustin SCORED 22 POINTS

Extraction of Paragraph 48 HOME COURT: Toronto Raptors

WIN TEAM: Toronto LOSE TEAM: Wizards SCORE: 95-93
PLAYER WITH HIGHEST POINTS: Lou Williams SCORED 27 POINTS

Extraction of Paragraph 49

**HOME COURT: New Orleans Pelicans** 

WIN TEAM: Indiana LOSE TEAM: Pelicans SCORE: 106-93 PLAYER WITH HIGHEST POINTS: West SCORED 17 POINTS

Extraction of Paragraph 50

**HOME COURT: Cleveland Cavaliers** 

WIN TEAM: Cleveland LOSE TEAM: Heat SCORE: 113-93 PLAYER WITH HIGHEST POINTS: James SCORED 18 POINTS

Extraction of Paragraph 51

**HOME COURT: Milwaukee Bucks** 

WIN TEAM: Bucks LOSE TEAM: Kings SCORE: 111-103

PLAYER WITH HIGHEST POINTS: DeMarcus Cousins SCORED 28 POINTS

Extraction of Paragraph 52

**HOME COURT: Minnesota Timberwolves** 

WIN TEAM: Warriors LOSE TEAM: Timberwolves SCORE: 94-91 PLAYER WITH HIGHEST POINTS: Stephen Curry SCORED 25 POINTS

Extraction of Paragraph 53

HOME COURT: Oklahoma City Thunder

WIN TEAM: Oklahoma LOSE TEAM: Grizzlies SCORE: 105-89
PLAYER WITH HIGHEST POINTS: Kevin Durant SCORED 26 POINTS

Extraction of Paragraph 54

**HOME COURT: Dallas Mavericks** 

WIN TEAM: Mavericks LOSE TEAM: Jazz SCORE: 87-82 PLAYER WITH HIGHEST POINTS: Barea SCORED 22 POINTS

Extraction of Paragraph 55

**HOME COURT: Portland Trail Blazers** 

WIN TEAM: Blazers LOSE TEAM: Lakers SCORE: 102-86

PLAYER WITH HIGHEST POINTS: Wesley Matthews SCORED 20 POINTS

Extraction of Paragraph 56

**HOME COURT: Los Angeles Clippers** 

WIN TEAM: Clippers LOSE TEAM: Dallas SCORE: 115-98

# PLAYER WITH HIGHEST POINTS: ??? SCORED ??? POINTS

Extraction of Paragraph 57

HOME COURT: New York Knicks

WIN TEAM: State LOSE TEAM: York SCORE: 106-92

PLAYER WITH HIGHEST POINTS: Stephen Curry SCORED 22 POINTS

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[note: correct -> 1, wrong -> 0, missing -> 2]
[Please ignore the fifth line of each Evaluation of Paragraph]

# **MY EVALUATION**

```
Extraction of Paragraph 1
111
11
6/6
      100%
Extraction of Paragraph 2
111
11
6/6
      100%
Extraction of Paragraph 3
1
111
11
      100%
6/6
Extraction of Paragraph 4
111
11
      100%
6/6
Extraction of Paragraph 5
1
111
11
6/6
      100%
```

Extraction of Paragraph 6

```
1
111
11
6/6
      100%
Extraction of Paragraph 7
101
11
5/6
      83%
Extraction of Paragraph 8
111
11
6/6
      100%
Extraction of Paragraph 9
1
111
11
      100%
6/6
Extraction of Paragraph 10
111
11
      100%
6/6
Extraction of Paragraph 11
1
111
11
6/6
      100%
Extraction of Paragraph 12
111
11
6/6
      100%
Extraction of Paragraph 13
111
11
6/6
      100%
Extraction of Paragraph 14
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111
10
6/6
      100%
Extraction of Paragraph 15
111
11
6/6
      100%
Extraction of Paragraph 16
111
11
      100%
6/6
Extraction of Paragraph 17
111
11
6/6
      100%
Extraction of Paragraph 18
111
11
6/6
      100%
Extraction of Paragraph 19
111
0 0
4/6
      67%
Extraction of Paragraph 20
1
111
0 1
5/6
      83%
Extraction of Paragraph 21
111
11
      100%
6/6
Extraction of Paragraph 22
111
```

```
11
6/6
      100%
Extraction of Paragraph 23
111
0 0
6/6
      100%
Extraction of Paragraph 24
111
11
6/6
      100%
Extraction of Paragraph 25
111
11
      100%
6/6
Extraction of Paragraph 26
1
111
00
4/6
      67%
Extraction of Paragraph 27
111
11
      100%
6/6
Extraction of Paragraph 28
111
11
6/6
      100%
Extraction of Paragraph 29
111
11
6/6
      100%
Extraction of Paragraph 30
1
111
11
```

```
6/6
      100%
Extraction of Paragraph 31
111
11
      100%
6/6
Extraction of Paragraph 32
1
111
11
6/6
      100%
Extraction of Paragraph 33
111
0 0
4/6
      67%
Extraction of Paragraph 34
111
11
6/6
      100%
Extraction of Paragraph 35
111
11
6/6
      100%
Extraction of Paragraph 36
1
111
11
6/6
      100%
Extraction of Paragraph 37
111
11
6/6
      100%
Extraction of Paragraph 38
111
0 1
5/6
      83%
```

```
Extraction of Paragraph 39
111
11
6/6
      100%
Extraction of Paragraph 40
111
22
4/6
      67%
Extraction of Paragraph 41
111
11
6/6
      100%
Extraction of Paragraph 42
1
111
11
      100%
6/6
Extraction of Paragraph 43
222
11
3/6
      50%
Extraction of Paragraph 44
111
11
6/6
      100%
Extraction of Paragraph 45
111
11
6/6
      100%
Extraction of Paragraph 46
1
111
11
6/6
      100%
```

```
Extraction of Paragraph 47
111
11
6/6
      100%
Extraction of Paragraph 48
1
111
11
      100%
6/6
Extraction of Paragraph 49
111
11
6/6
      100%
Extraction of Paragraph 50
111
00
4/6
      67%
Extraction of Paragraph 51
111
11
      100%
6/6
Extraction of Paragraph 52
1
111
11
6/6
      100%
Extraction of Paragraph 53
111
11
6/6
      100%
Extraction of Paragraph 54
111
11
6/6
      100%
```

Extraction of Paragraph 55

```
1
1 1 1
1 1
6/6 100%

Extraction of Paragraph 56
1
1 1 1
2 2
4/6 67%

Extraction of Paragraph 57
1
1 1 1
1 1
6/6 100%
```