

Literacy 201602

coop711

2016-09-18

Data

정답과 대조하여 R(Right)/W(Wrong) 표시

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24	A25
R	R	W	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	W	W	R	R	R	R	R	W	R	R	W	R	R	R	W	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	W	R	R	W	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	W
R	R	R	R	R	R	R	R	R	R	R	W	R	R	R	R	W	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	W	R	R	R	R
R	R	R	R	R	R	R	R	W	R	R	W	R	R	R	R	W	R	R	R	W	W	W	W	R
R	R	R	W	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
R	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
W	W	R	R	R	W	R	R	R	R	R	R	R	R	R	R	W	W	W	W	R	W	R	W	R
R	W	W	R	R	R	R	R	W	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	W	R	W	R	R	W	W	R	R	R	R	W	R	R	R	R	W	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	W	R	R	R	R	W	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	W	R	R	R	R	W	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	W	R	R	R
R	R	R	R	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

[illegible]

R	R	R	R	R	W	R	W	W	R	W	R	W	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	NA	NA	R	R	R	R	R	R	W	R	R	R	R	W	R	R	R	W	W	W	W	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	W	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	W	R	R	R	W	R	R	W	R	R	W	R	R	W	R	R	R	R	R	R	R	W	R	W
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	W	R	R	R	R	R	W	R	R	R	R	W	R	R	R	R	R	R	R	R
R	R	W	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	W	R	R	W	R	R	R	R	R	R	R	R	R	W
R	R	R	R	R	R	R	R	R	R	R	W	R	R	W	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	W	R	R	R	W	W	R	R
R	R	R	R	R	W	R	R	W	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	W	R	R	W	R	R	R	W	W	R	R	W	R	R	R	W	R
R	R	W	R	R	W	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	W	W	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R
R	R	R	R	W	W	R	W	W	R	R	R	R	R	R	R	R	W	R	R	W	W	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	W	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	W	R	R	R	R	R
R	R	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
R	R	W	R	R	R	R	R	W	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

학생별 점수 산출

92, 80, 100, 84, 92, 96, 92, 72, 92, NA, 96, 96, 64, 84, 76, 100, NA, 100, 92, 100, 92, 100, NA, NA, 96, 96, 96, 96, 96, 100, 96, 96, 76, 92, 92, NA, 84, 88, 92, 100, 92, 84, 80, 72, 84, 96, NA, 96, NA, 92, 76, 100, 92, 80, 88, 80, 52, 84, 100, 96, 28, 84, 96, 96, 92, NA, 88, 84, NA, 96, 88, 92, 80, 68, 100, 92, 100, 72, NA, 96, 100, 88, 92, 96, 88, 92, 96, 88, 88, 76, 88, 88, 72, 72, 100, 92, 92, 96, 100 and 92

Red and Black 비교

- **Red:**

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
64	84	92	88.82	96	100	6

- **Black:**

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
28	85	92	88.7	96	100	4

```
##  
## The decimal point is 1 digit(s) to the right of the |  
##  
##      2 | 8  
##      3 |  
##      4 |  
##      5 | 2  
##      6 | 48  
##      7 | 222226666  
##      8 | 000004444444448888888888  
##      9 | 222222222222222222226666666666666666666  
##     10 | 000000000000000
```

- Red

```
stem(literacy.score[Red], scale = 0.5)
```

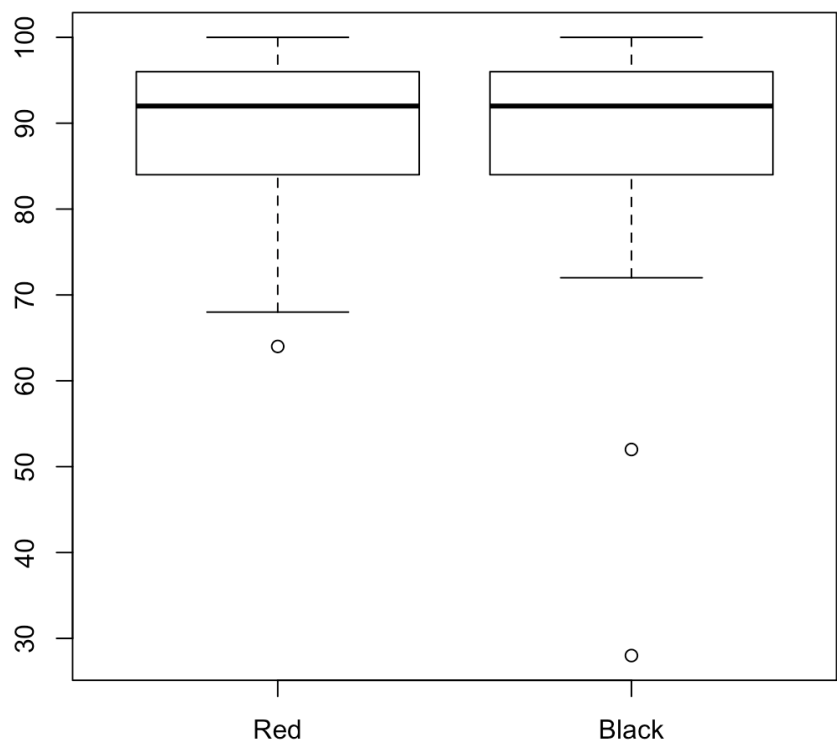
```
##
## The decimal point is 1 digit(s) to the right of the |
##
## 6 | 48
## 7 | 22266
## 8 | 4444444888888
## 9 | 222222222666666666
## 10 | 000000
```

- Black

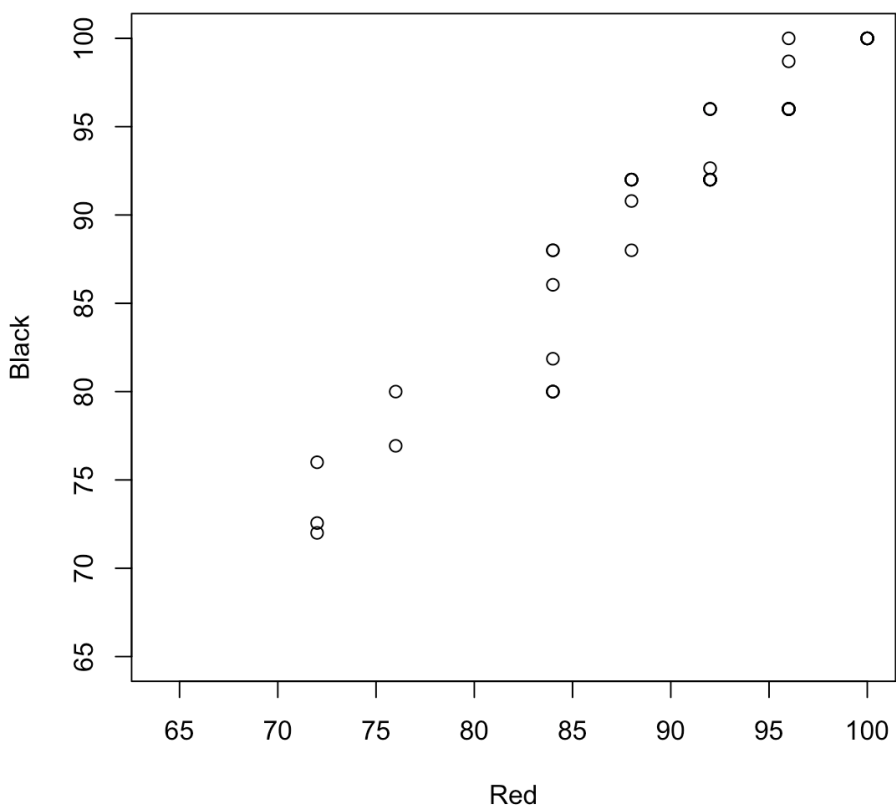
```
stem(literacy.score[Black])
```

```
##
## The decimal point is 1 digit(s) to the right of the |
##
## 2 | 8
## 3 |
## 4 |
## 5 | 2
## 6 |
## 7 | 2266
## 8 | 0000048888
## 9 | 2222222222266666666666
## 10 | 00000000
```

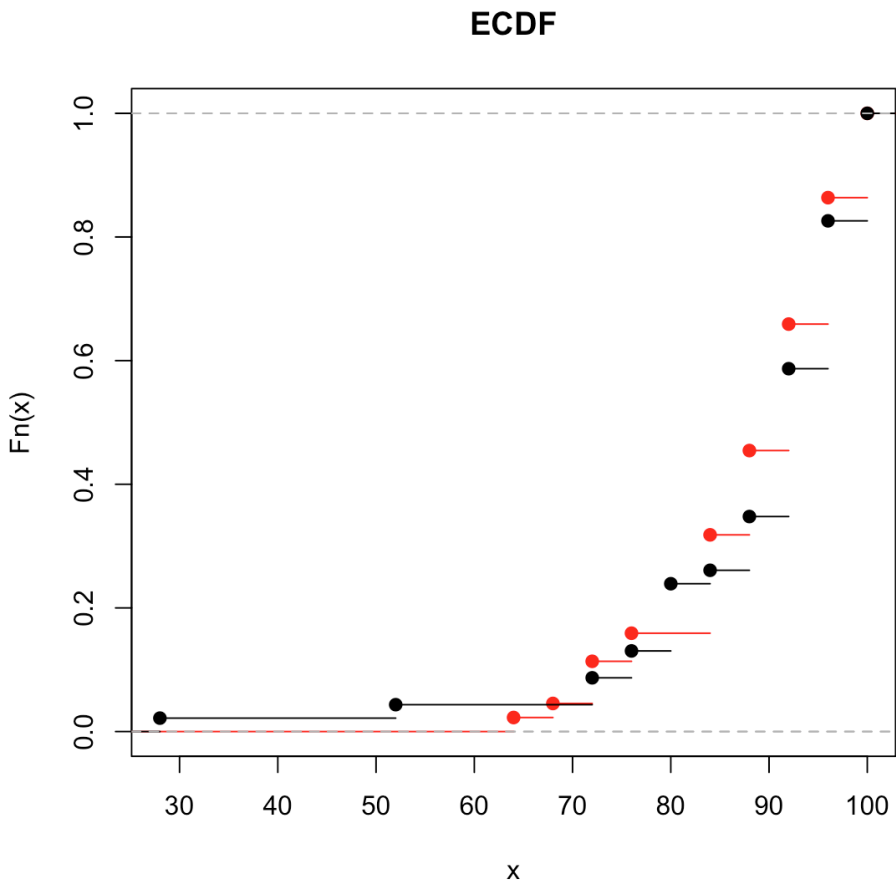
Box Plots



QQ plot



ECDF plot



문해력 등급 판정

- I수준(24점 이하), II수준(28 ~ 48점), III수준(52 ~ 72점), IV수준(76점 이상)

문해력 등급 분포

I	II	III	IV	결석
0	1	8	81	10

그룹별 문해력 등급 분포

	I	II	III	IV	결석
Red	0	0	5	39	6
Black	0	1	3	42	4

문항 유형별 점수 분석

유형별 정답률

	유형	정답률
문1	사실적	98.9
문2	사실적	93.3
문3	비판적	83.3
문4	사실적	95.6
문5	추론적	94.4
문6	추론적	74.4
문7	추론적	100.0
문8	사실적	85.6
문9	추론적	58.9
문10	추론적	94.4
문11	사실적	96.7
문12	사실적	64.4
문13	사실적	94.4
문14	추론적	98.9
문15	사실적	91.1
문16	사실적	92.2
문17	추론적	65.6
문18	비판적	96.7
문19	사실적	97.8
문20	사실적	96.7
문21	사실적	90.0
문22	비판적	78.9
문23	추론적	94.4
문24	사실적	88.9
문25	추론적	93.3

어려운 문제?

정답률 80% 이하

문6	문9	문12	문17	문22
74.44	58.89	64.44	65.56	78.89

정답률 70% 이하

문9	문12	문17
58.89	64.44	65.56

정답률 60% 이하

문9
정답률 58.89