Stat101 Homework Report for Section A and Unit 2

Overview

The 3 homework outcome files are Topic06.A.csv, Topic07.A.csv, Topic08.A.csv.

There are 50 students in Section A submitting their answers. 50 of them did all the homeworks. Since different homeworks have different full scores, the percentages correct are used to compare among homeworks. The average correct percents for the 3 homeworks are 82, 91, 72, respectively. Figure 1 compares the histograms of those homeworks. Table 1 and Figure 2 display the basic summaries of the scores.

	Mean	Std.dev	Min	Median	Max
Topic06	82.40	14.90	32.00	88.00	100.00
Topic07	90.80	7.55	56.00	92.00	100.00
Topic08	71.55	20.69	13.64	77.27	100.00

Table 1: Summary statistics for correct percentage. Topic07 has the highest mean correct percentage, while Topic08 has the lowest. Topic08 has the largest standard deviation, and Topic07 has the smallest.
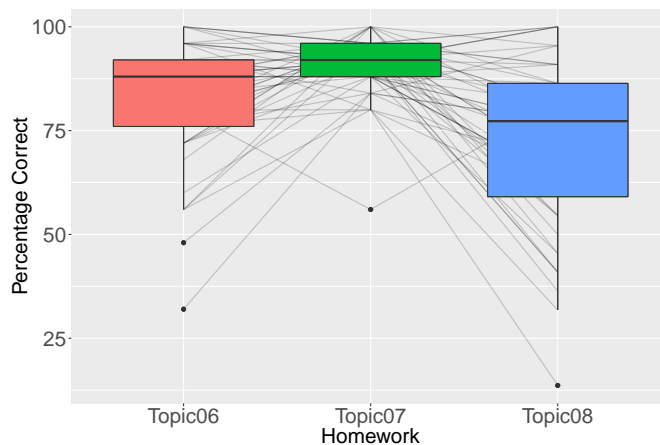

Figure 2: Side-by-side boxplots of the percentages correct by students homeworks. Topic07 has the highest median, while Topic08 has the lowest median.
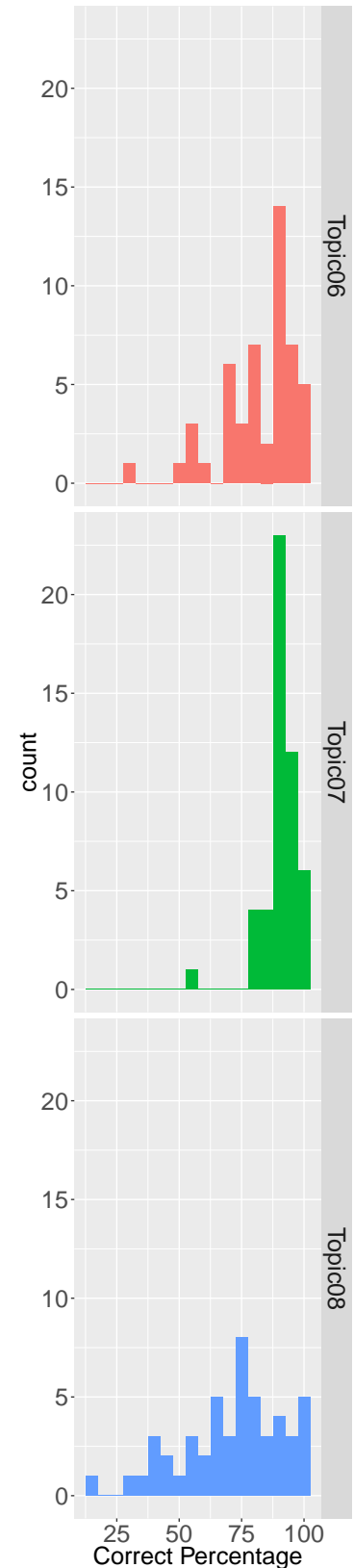

Figure 1: Histograms of the percentages correct by students homeworks.

Students

Figure 3 and Table 2 give the percentage scores of each homework of all homeworks for every student in this section. Table 2 also provides the mean percentages by student. The students are sorted by their average percentage score of 3 homeworks. Table 3 lists the students who were in the lower 20% of the class.
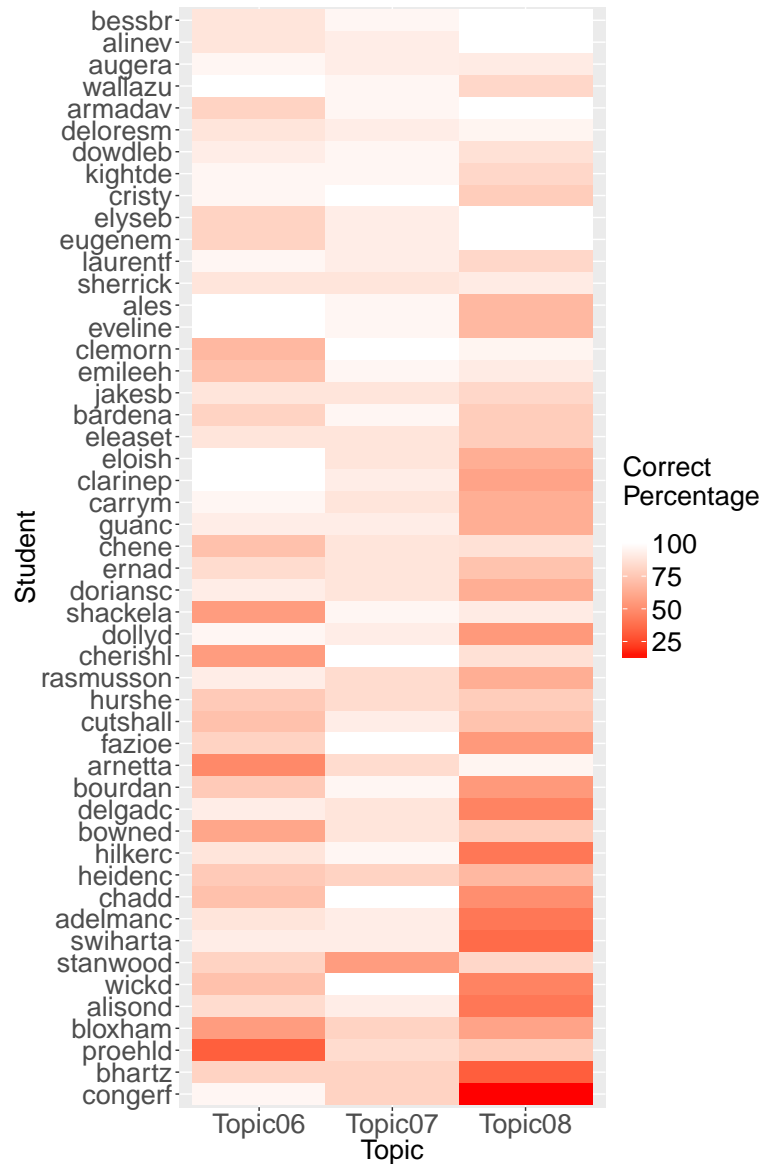

Figure 3: Heatmap of the percentage scores of all homeworks for students in the section. The grey areas are the missing values.

	Topic06	Topic07	Topic08	AvgCrtPct
bessbr	88.00	96.00	100.00	94.67
alinev	88.00	92.00	100.00	93.33
augera	96.00	92.00	90.91	92.97
wallazu	100.00	96.00	81.82	92.61
armadav	80.00	96.00	100.00	92.00
deloresm	88.00	92.00	95.45	91.82
dowdleb	92.00	96.00	86.36	91.45
kightde	96.00	96.00	81.82	91.27
cristy	96.00	100.00	77.27	91.09
elyseb	80.00	92.00	100.00	90.67
eugenem	80.00	92.00	100.00	90.67
laurentf	96.00	92.00	81.82	89.94
sherrick	88.00	88.00	90.91	88.97
ales	100.00	96.00	68.18	88.06
eveline	100.00	96.00	68.18	88.06
clemorn	68.00	100.00	95.45	87.82
emileeh	72.00	96.00	90.91	86.30
jakesb	88.00	88.00	81.82	85.94
bardena	80.00	96.00	77.27	84.42
eleaset	88.00	88.00	77.27	84.42
eloish	100.00	88.00	63.64	83.88
clarinep	100.00	92.00	59.09	83.70
carrym	96.00	88.00	63.64	82.55
guanc	92.00	92.00	63.64	82.55
chene	72.00	88.00	86.36	82.12
ernad	84.00	88.00	72.73	81.58
doriansc	92.00	88.00	63.64	81.21
shackela	56.00	96.00	90.91	80.97
dollyd	96.00	92.00	54.55	80.85
cherishl	56.00	100.00	86.36	80.79
rasmusson	92.00	84.00	63.64	79.88
hurshe	76.00	84.00	77.27	79.09
cutshall	72.00	92.00	72.73	78.91
fazioe	80.00	100.00	54.55	78.18
arnetta	48.00	84.00	95.45	75.82
bourdan	76.00	96.00	54.55	75.52
delgadc	92.00	88.00	45.45	75.15
bowned	60.00	88.00	77.27	75.09
hilkerc	88.00	96.00	40.91	74.97
heidenc	76.00	80.00	68.18	74.73
chadd	72.00	100.00	50.00	74.00
adelmanc	88.00	92.00	40.91	73.64

swiharta	92.00	92.00	36.36	73.45
stanwood	80.00	56.00	81.82	72.61
wickd	72.00	100.00	45.45	72.48
alisond	84.00	92.00	40.91	72.30
bloxham	56.00	80.00	59.09	65.03
proehld	32.00	84.00	77.27	64.42
bhartz	80.00	80.00	31.82	63.94
congerf	96.00	80.00	13.64	63.21

Table 2: Percentage scores of all homeworks for the students. 22% of the students have the average correct percentage greater than 90%, and 0% of the students have their average correct percentage below 60%.

	Topic06	Topic07	Topic08
clemorn	X		
shackela	X		
cherishl	X		
rasmusson		X	
hurshe		X	
arnetta	X	X	
delgadc			X
bowned	X		
hilkerc			X
heidenc		X	
chadd			X
adelmanc			X
swiharta			X
stanwood		X	
wickd			X
alisond			X
bloxham	X	X	
proehld	X	X	
bhartz		X	X
congerf		X	X

Table 3: Students whose scores were under 20% of the class.

Missing Data

Figure 4 shows the summary of missing homeworks from the students. Table 4 lists the students who missed at least one homework.

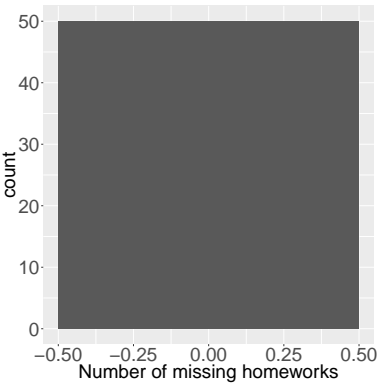| Times.Missing |
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Table 4: Students with missing homeworks.

Figure 4: Histogram of the missing homeworks.

Acknowledgement