

Data test

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This is a report for the questions of the data test from Tiny Totos Kenya.

Solutions to question one part 1

Table 1: Column and Row averages.

X1	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov
2015	642.00	636.00	779.00	468.00	746.00	1033.00	1451	1209.00	1616.00	2508.00	2081.00
2016	2646.00	3061.00	4203.00	2640.00	4070.00	4624.00	5307	4943.00	5728.00	5731.00	3588.00
2017	5503.00	5719.00	6480.00	4021.00	6051.00	6126.00	5815	2619.00	5570.00	6952.00	4467.00
column averages	2930.33	3138.67	3820.67	2376.33	3622.33	3927.67	4191	2923.67	4304.67	5063.67	3378.67

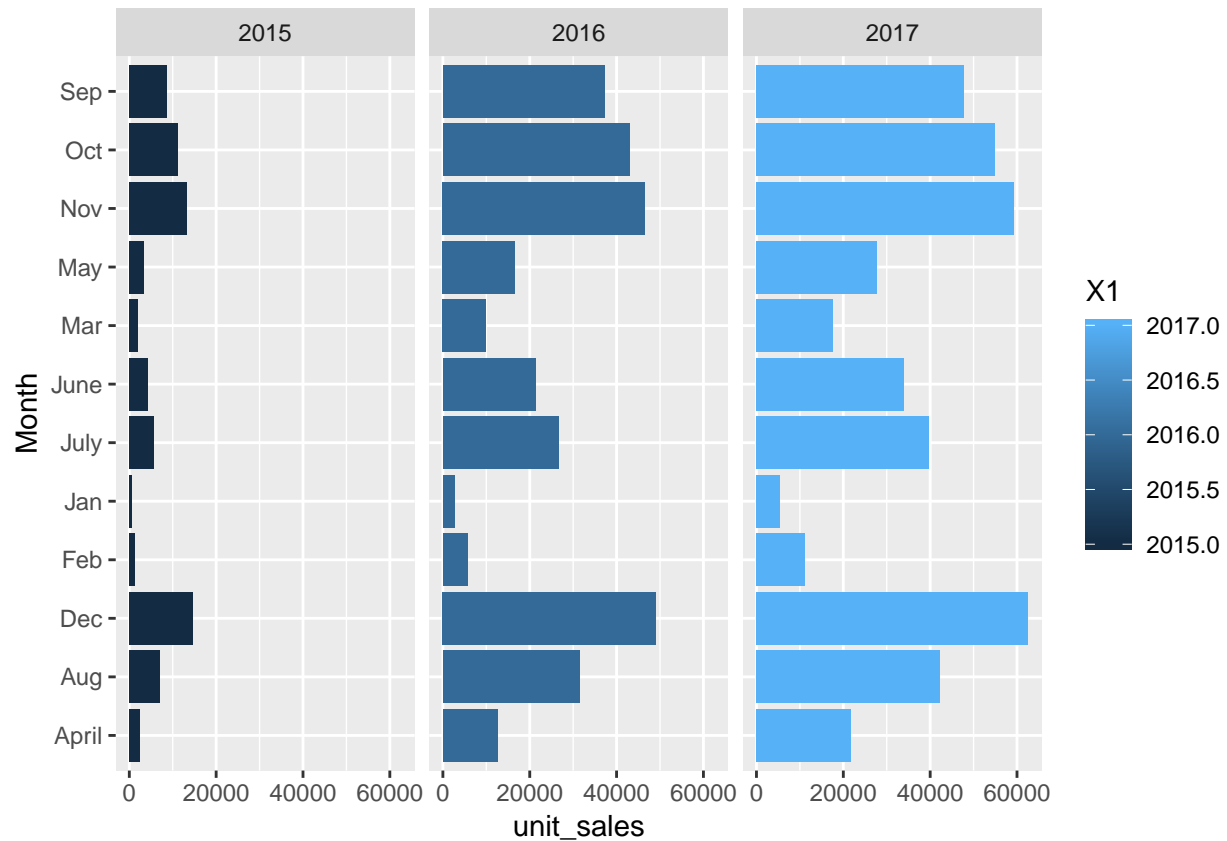
The table above shows the row and column averages.

Solutions for question part two and three

This are the solutions to question 1 part two about cumulative unit sales from January 2015 to December 2017.

Table 2: Cumulative Unit sales.

X1	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec
2015	642	1278	2057	2525	3271	4304	5755	6964	8580	11088	13169	14585
2016	2646	5707	9910	12550	16620	21244	26551	31494	37222	42953	46541	49102
2017	5503	11222	17702	21723	27774	33900	39715	42334	47904	54856	59323	62594

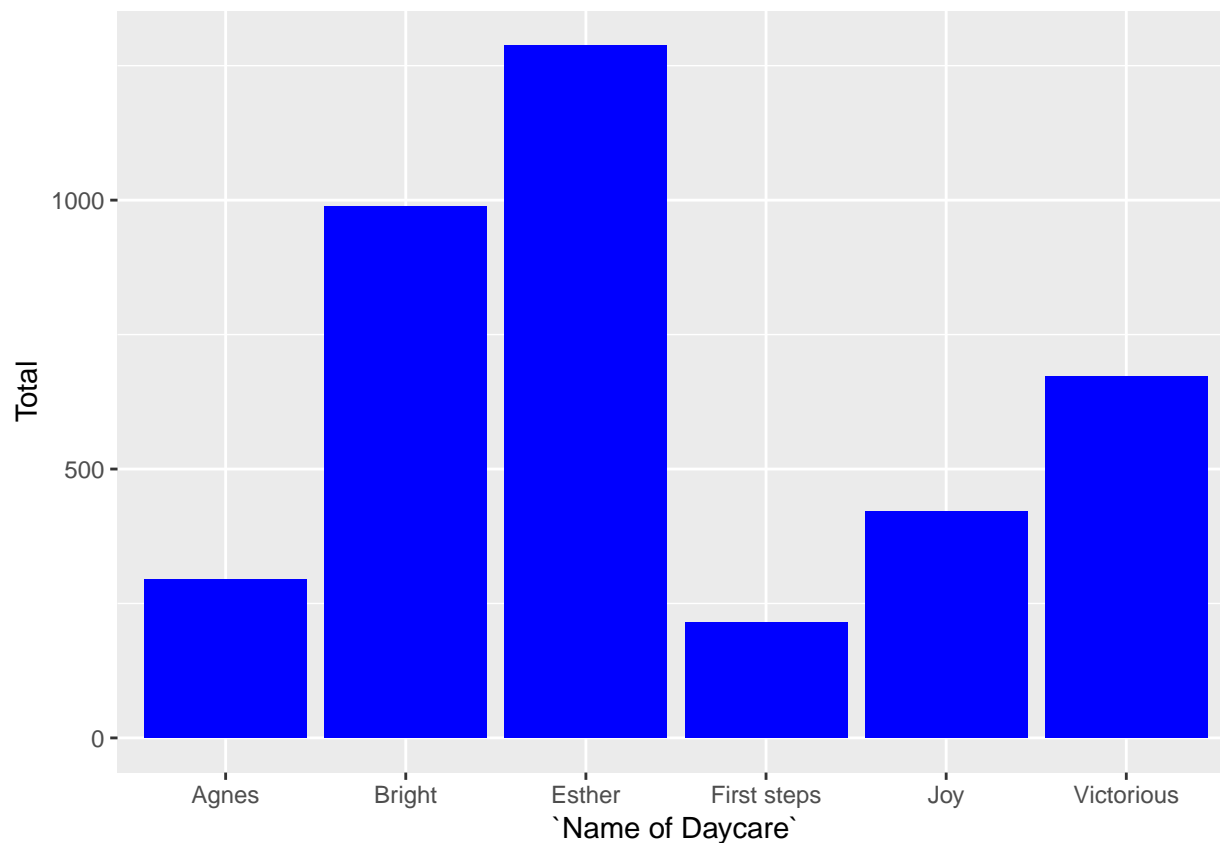


Solutions for question 2 part a

This is the filled blank spaces showing the respective percentages.

Table 3: Filled blank spaces for percentages.

Name of Daycare	Daycare service	Meals served	Total	Daycare service %
Joy	385.00000	36.00000	421	91.44893
Victorious	501.00000	172.00000	673	74.44279
Esther	672.00000	616.00000	1288	52.17391
Bright	688.00000	300.00000	988	69.63563
Agnes	196.00000	99.00000	295	66.44068
First steps	107.00000	107.00000	214	50.00000
Total	2549.00000	1330.00000	3879	65.71281
Percentage	65.71281	34.28719	100	65.71281
The figure that follows show daycare service and their percentages. Total of meal served and daycare service offered				



Solutions for question 3

This table represents the list of attendance of children from January to march for 13 children arranged in alphabetical order.

Table 4: Name in alphabetical order.

Name	Jan	Feb	Mar
Clinton Munyi	24	22	19
Clinton Otieno	13	19	22
Emmanuel Kasera	5	3	4
Emmanuel Mraka	8	10	13
George Clevic	5	12	12
Loise Njeri	6	5	0
Maina Jackson	3	3	5
Margret Muthoni	0	3	23
Princess Owino	12	10	13
Retna Njeri	12	21	21
Samuel Maina	12	12	1
Trisa Muthoni	21	22	23

This table below shows children who attended more ten times in the month of February.

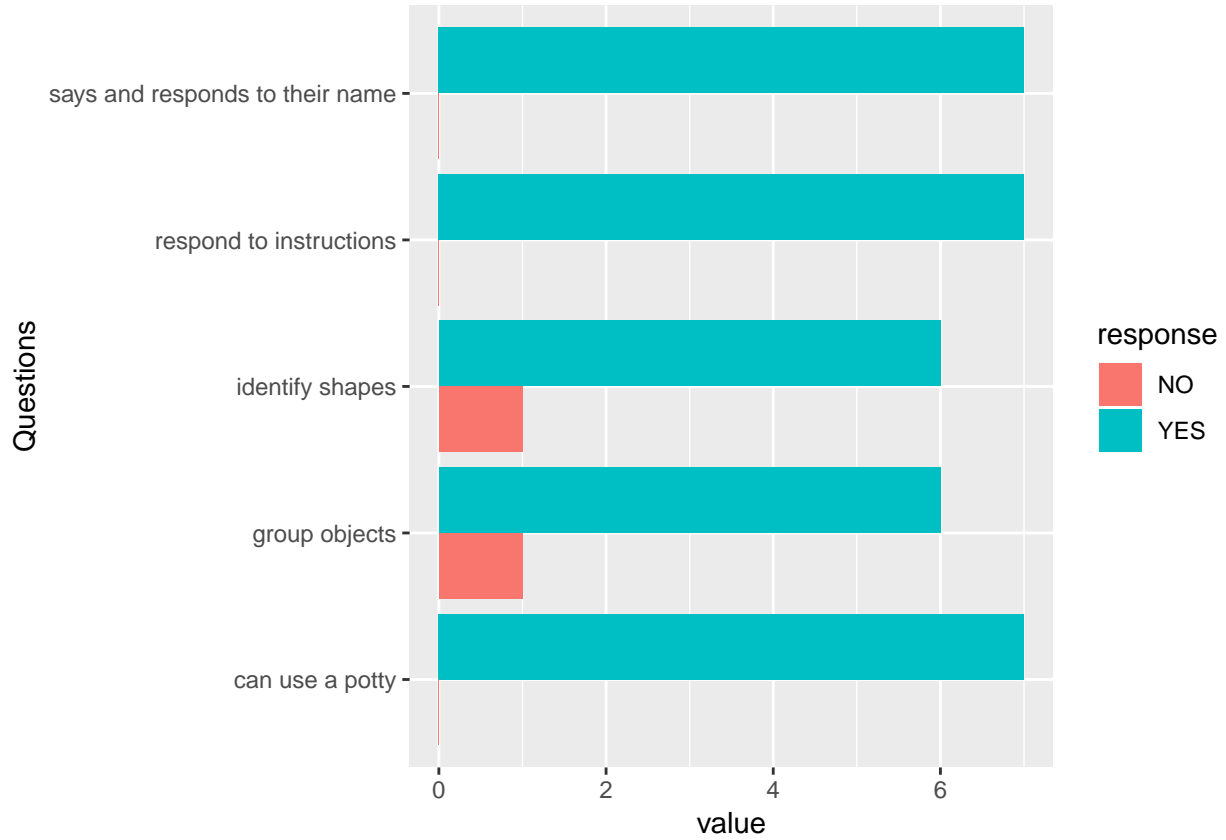
Table 5: February attendance exceeding 10 days.

Name	Jan	Feb	Mar
Clinton Munyi	24	22	19
Clinton Otieno	13	19	22
George Clevic	5	12	12
Retna Njeri	12	21	21
Samuel Maina	12	12	1
Trisa Muthoni	21	22	23

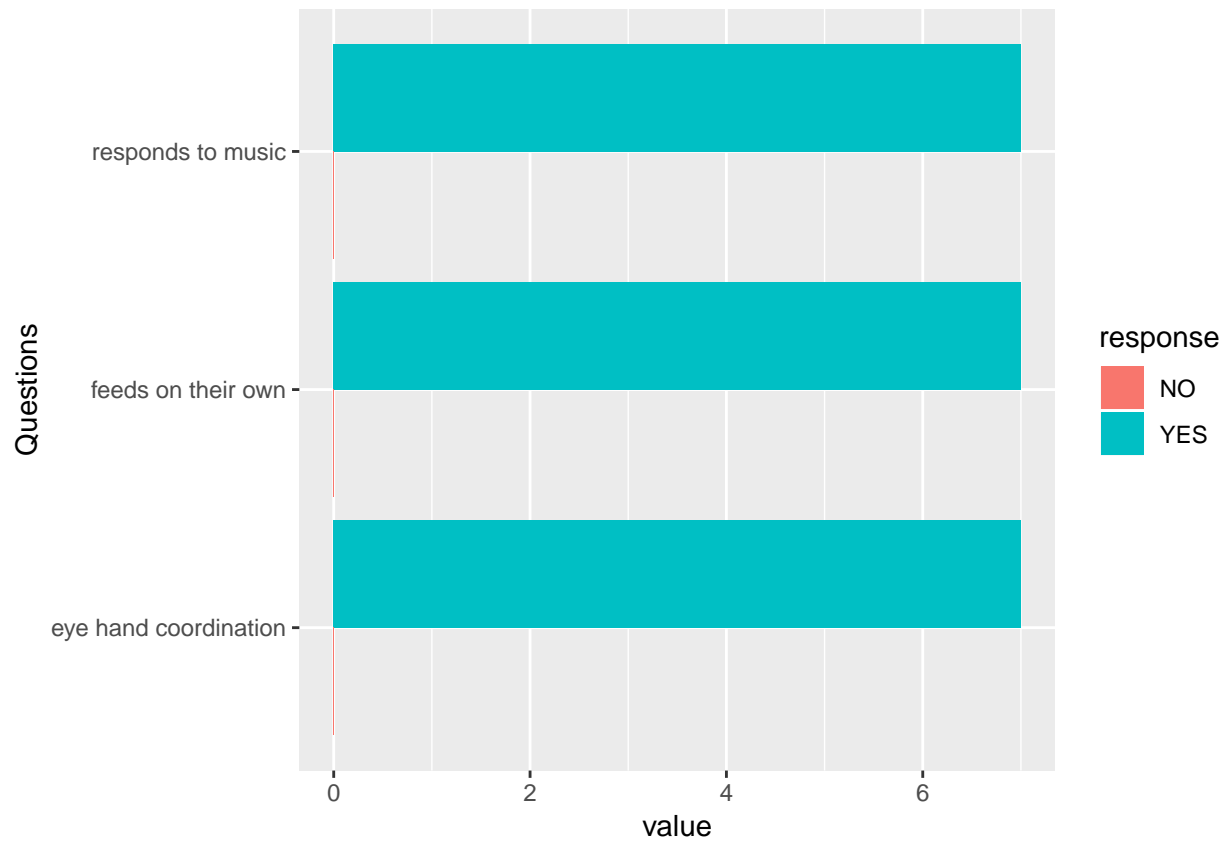
It shows that only 6 had attendance above 10 days in the month of February.

Solutions for question 4

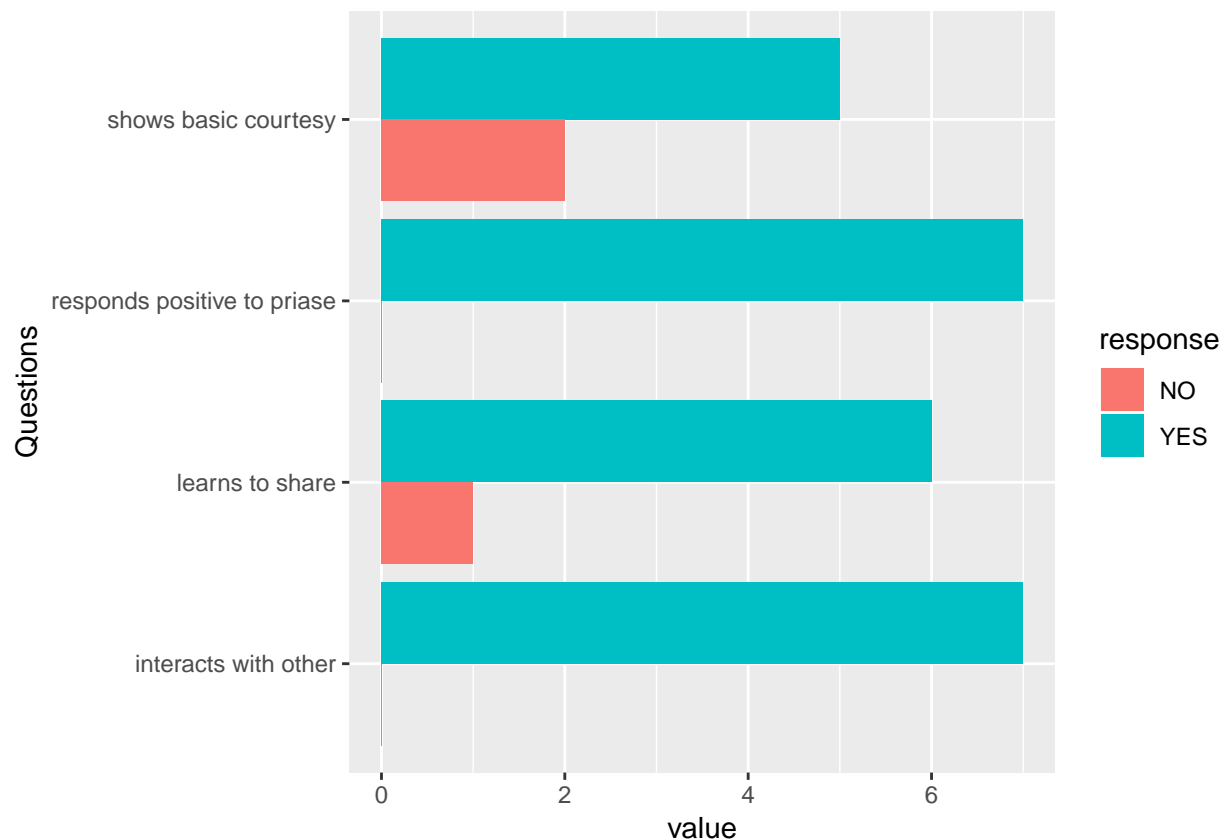
The following is an analysis of children aged 3- 4 years of age.



The figure above shows that in term of cognitive ability all children could read to instructions, use a potty and both say and respond to their name. On the other hand, 85.7% of the children could identify group objects and identify shapes while 14.3% could not.



The figure above shows that in term of physical ability all children could respond to music, feed on their own and had good eye - hand coordination. identify shapes while 14.3% could not.



The figure above shows that in term of social or emotional ability all children could interact with their peers and respond to positive praise. However, 85% of the children could learn to share while 15 percent could not easily learn to share. Finally, it shows that 71.42% of the children could show basic courtesy while 28.58 could not.

Solutions to question five

This following table shows a cleaned data set and a brief description follows.

Table 6: Cleaned data of payments.

Number	Daycare	Name of child	Start_date	End_date	Payment(Kshs)
1	BF_Daycare	Njoki	2018-08-06	2018-08-08	100
1	BF_Daycare	Njoki	2018-09-10	2018-11-05	100
1	BF_Daycare	Njoki	2018-11-06	2018-12-31	100
2	BF_Daycare	Pendo	2018-10-03	2018-11-14	100
2	BF_Daycare	Pendo	2018-11-15	2018-12-17	100
2	BF_Daycare	Pendo	2019-04-29	2019-06-17	100
3	BF_Daycare	Nyambura	2018-07-15	2018-08-14	100
3	BF_Daycare	Nyambura	2018-08-15	2018-09-12	100
3	BF_Daycare	Nyambura	2018-10-15	2018-01-17	100
17	YV_Daycare	Faith	2019-03-04	2019-04-10	100
24	YV_Daycare	Maina	2019-03-04	2019-04-03	100
24	YV_Daycare	Maina	2019-04-04	2019-05-04	100
59	YV_Daycare	Kakui	2019-03-06	2019-05-08	100

Number	Daycare	Name of child	Start_date	End_date	Payment(Kshs)
60	Pre_Daycare	Njeri	2019-03-05	2019-05-07	30
60	Pre_Daycare	Njeri	2019-05-08	2019-06-13	100
61	Pre_Daycare	Mwai	2019-05-08	2019-06-13	50
61	Pre_Daycare	Mwai	2019-03-05	2019-05-07	100
62	Pre_Daycare	Ngendo	2019-03-01	2019-05-20	100

The table above shows payment per child to three different daycares, from the date they began the payment to the last date covered by the specific payment. Payment is in shillings.

Note: Each row represents a different payment and each column a different characteristic.