## rWorksheet\$4c

## Rey Angelo Calopez BSIT 2-C

## 2023-11-22

1.

a.

```
library(readr)
load_mpg <- read.csv("mpg.csv")
load_mpg</pre>
```

##		V m	anufacturer	modol	displ	woor	CII	trans	dru	ctv
##	1	1	anuracturer audi	a4		1999	4	auto(15)	f	18
	2	2	audi	a4		1999	-	manual(m5)	f	21
##	3	3	audi	a4		2008		manual (m6)	f	20
##	4	4	audi	a4		2008	4	auto(av)	f	21
##	5	5	audi	a4		1999	6	auto(15)	f	16
	6	6	audi	a4		1999	6	manual(m5)	f	18
	7	7	audi	a4		2008	6	auto(av)	f	18
##	8	8	audi	a4 quattro	1.8	1999	4	manual(m5)	4	18
##	9	9	audi	a4 quattro		1999	4	auto(15)	4	16
##	10	10	audi	a4 quattro	2.0	2008	4	manual(m6)	4	20
##	11	11	audi	a4 quattro	2.0	2008	4	auto(s6)	4	19
##	12	12	audi	a4 quattro	2.8	1999	6	auto(15)	4	15
##	13	13	audi	a4 quattro	2.8	1999	6	manual(m5)	4	17
##	14	14	audi	a4 quattro	3.1	2008	6	auto(s6)	4	17
##	15	15	audi	a4 quattro	3.1	2008	6	manual(m6)	4	15
##	16	16	audi	a6 quattro	2.8	1999	6	auto(15)	4	15
##	17	17	audi	a6 quattro	3.1	2008	6	auto(s6)	4	17
##	18	18	audi	a6 quattro	4.2	2008	8	auto(s6)	4	16
##	19	19	chevrolet	c1500 suburban 2wd	5.3	2008	8	auto(14)	r	14
##	20	20	chevrolet	c1500 suburban 2wd	5.3	2008	8	auto(14)	r	11
##	21	21	chevrolet	c1500 suburban 2wd	5.3	2008	8	auto(14)	r	14
	22	22	chevrolet	c1500 suburban 2wd		1999	8	auto(14)	r	13
	23	23	chevrolet	c1500 suburban 2wd		2008	8	auto(14)	r	12
	24	24	chevrolet	corvette		1999	8	manual(m6)	r	16
	25	25	chevrolet	corvette		1999	8	auto(14)	r	15
##	26	26	chevrolet	corvette		2008	8	manual(m6)	r	16
##	27	27	chevrolet	corvette		2008	8	auto(s6)	r	15
##	28	28	chevrolet	corvette		2008	8	manual(m6)	r	15
##	29	29	chevrolet	k1500 tahoe 4wd		2008	8	auto(14)	4	14
##	30	30	chevrolet	k1500 tahoe 4wd		2008	8	auto(14)	4	11
##	31	31	chevrolet	k1500 tahoe 4wd		1999	8	auto(14)	4	11
##	32	32	chevrolet	k1500 tahoe 4wd		1999	8	auto(14)	4	14
##	33	33	chevrolet	malibu		1999	4	auto(14)	f	19
##	34	34	chevrolet	malibu		2008	4	auto(14)	f	22
##	35	35	chevrolet	malibu	3.1	1999	6	auto(14)	f	18

##	36	36	chevrolet	malik	nı 3.5	2008	6	auto(14)	f	18
	37	37	chevrolet	malik		2008	6	auto(s6)	f	17
	38	38	dodge	caravan 2w		1999	4	auto(13)	f	18
	39	39	dodge	caravan 2w		1999	6	auto(14)	f	17
	40	40	dodge	caravan 2w		1999	6	auto(14)	f	16
	41	41	dodge	caravan 2w		1999	6	auto(14)	f	16
	42	42	dodge	caravan 2w		2008	6	auto(14)	f	17
	43	43	dodge	caravan 2w		2008	6	auto(14)	f	17
	44	44	•	caravan 2w		2008	6	auto(14)	f	11
	45	45	dodge			1999	6	auto(14)	f	15
			dodge	caravan 2			6		f	15
	46	46	dodge	caravan 2		1999		auto(14)		
	47	47	dodge	caravan 2		2008	6	auto(16)	f	16
	48	48	dodge	caravan 2w		2008	6	auto(16)	f	16
	49	49	dodge	dakota pickup 4w		2008		manual(m6)	4	15
	50	50	dodge	dakota pickup 4w		2008	6	auto(14)	4	14
	51	51	dodge	dakota pickup 4w		1999	6	auto(14)	4	13
	52	52	dodge	dakota pickup 4w		1999		manual(m5)	4	14
	53	53	dodge	dakota pickup 4w		2008	8	auto(15)	4	14
##	54	54	dodge	dakota pickup 4w		2008	8	auto(15)	4	14
##	55	55	dodge	dakota pickup 4w	1d 4.7	2008	8	auto(15)	4	9
##	56	56	dodge	dakota pickup 4w	rd 5.2	1999	8	manual(m5)	4	11
##	57	57	dodge	dakota pickup 4w	7d 5.2	1999	8	auto(14)	4	11
##	58	58	dodge	durango 4w	rd 3.9	1999	6	auto(14)	4	13
##	59	59	dodge	durango 4w	rd 4.7	2008	8	auto(15)	4	13
##	60	60	dodge	durango 4w	rd 4.7	2008	8	auto(15)	4	9
##	61	61	dodge	durango 4w	rd 4.7	2008	8	auto(15)	4	13
##	62	62	dodge	durango 4w	rd 5.2	1999	8	auto(14)	4	11
##	63	63	dodge	durango 4w	7d 5.7	2008	8	auto(15)	4	13
##	64	64	dodge	durango 4w	rd 5.9	1999	8	auto(14)	4	11
##	65	65	dodge	ram 1500 pickup 4w	rd 4.7	2008	8	manual(m6)	4	12
##	66	66	dodge	ram 1500 pickup 4w		2008	8	auto(15)	4	9
##	67	67	dodge	ram 1500 pickup 4w		2008	8	auto(15)	4	13
##	68	68	dodge	ram 1500 pickup 4w		2008	8	auto(15)	4	13
##	69	69	dodge	ram 1500 pickup 4w		2008	8	manual(m6)	4	12
##	70	70	dodge	ram 1500 pickup 4w		2008	8	manual(m6)	4	9
##	71	71	dodge	ram 1500 pickup 4w		1999	8	auto(14)	4	11
##		72	dodge	ram 1500 pickup 4w		1999		manual(m5)	4	11
	73	73	dodge	ram 1500 pickup 4w		2008	8	auto(15)	4	13
	74	74	dodge	ram 1500 pickup 4w		1999	8	auto(14)	4	11
	75	75	ford	expedition 2w		1999	8	auto(14)	r	11
	76	76	ford	expedition 2w		1999	8	auto(14)	r	11
	77	77	ford	expedition 2w		2008	8	auto(16)	r	12
	78	78	ford	explorer 4w		1999	6	auto(15)	4	14
	79	79	ford	explorer 4w		1999		manual(m5)	4	15
	80	80	ford	=		1999	6	auto(15)	4	14
	81	81	ford	explorer 4w explorer 4w		2008	6	auto(15)	4	13
				-						
##	82	82 83	ford	explorer 4		2008	8 8	auto(16)	4 4	13
	83		ford	explorer 4w		1999		auto(14)		13
##	84	84	ford	f150 pickup 4w		1999	6	auto(14)	4	14
	85	85 86	ford	f150 pickup 4w		1999		manual(m5)	4	14
##	86	86	ford	f150 pickup 4w		1999		manual(m5)	4	13
##	87	87	ford	f150 pickup 4w		1999	8	auto(14)	4	13
##	88	88	ford	f150 pickup 4w		2008	8	auto(14)	4	13
##	89	89	ford	f150 pickup 4w	na 5.4	1999	8	auto(14)	4	11

##	90	90	ford	f150 pickup 4wd	5.4	2008	8	auto(14)	4	13
	91	91	ford	mustang		1999	6		r	18
	92	92	ford	mustang		1999	6	auto(14)	r	18
##	93	93	ford	mustang		2008	6		r	17
##	94	94	ford	mustang		2008	6	auto(15)	r	16
##	95	95	ford	mustang		1999	8	auto(14)	r	15
##	96	96	ford	mustang		1999	8		r	15
##	97	97	ford	mustang		2008	8	manual(m5)	r	15
##	98	98	ford	mustang		2008	8	auto(15)	r	15
##	99	99	ford	mustang		2008	8	1 1	r	14
##	100	100	honda	civic	1.6	1999	4	manual(m5)	f	28
##	101	101	honda	civic	1.6	1999	4	auto(14)	f	24
##	102	102	honda	civic	1.6	1999	4	manual(m5)	f	25
##	103	103	honda	civic	1.6	1999	4	manual(m5)	f	23
##	104	104	honda	civic	1.6	1999	4	auto(14)	f	24
##	105	105	honda	civic	1.8	2008	4	manual(m5)	f	26
##	106	106	honda	civic	1.8	2008	4	auto(15)	f	25
##	107	107	honda	civic	1.8	2008	4	auto(15)	f	24
##	108	108	honda	civic	2.0	2008	4	manual(m6)	f	21
##	109	109	hyundai	sonata	2.4	1999	4	auto(14)	f	18
##	110	110	hyundai	sonata	2.4	1999	4	manual(m5)	f	18
##	111	111	hyundai	sonata	2.4	2008	4	auto(14)	f	21
##	112	112	hyundai	sonata	2.4	2008	4	manual(m5)	f	21
##	113	113	hyundai	sonata	2.5	1999	6	auto(14)	f	18
##	114	114	hyundai	sonata	2.5	1999	6	manual(m5)	f	18
##	115	115	hyundai	sonata	3.3	2008	6	auto(15)	f	19
##	116	116	hyundai	tiburon	2.0	1999	4	auto(14)	f	19
##	117	117	hyundai	tiburon	2.0	1999	4		f	19
##	118	118	hyundai	tiburon	2.0	2008	4	manual(m5)	f	20
##	119	119	hyundai	tiburon	2.0	2008	4	auto(14)	f	20
##	120	120	hyundai	tiburon		2008	6	auto(14)	f	17
##	121		hyundai	tiburon		2008	6	manual(m6)	f	16
##	122	122	hyundai	tiburon		2008	6	manual(m5)	f	17
##	123	123	jeep	grand cherokee 4wd		2008	6	auto(15)	4	17
##	124		jeep	grand cherokee 4wd		2008	6	auto(15)	4	15
##	125		jeep	grand cherokee 4wd		1999	6	auto(14)	4	15
##	126		jeep	grand cherokee 4wd		1999	8	auto(14)	4	14
##	127		jeep	grand cherokee 4wd		2008	8	auto(15)	4	9
##	128		jeep	grand cherokee 4wd		2008	8	auto(15)	4	14
##	129		jeep	grand cherokee 4wd		2008	8	auto(15)	4	13
##	130		jeep	grand cherokee 4wd		2008	8	auto(15)	4	11
##	131		land rover	range rover		1999	8	auto(14)	4	11
##	132		land rover	range rover		2008	8	auto(s6)	4	12
	133		land rover	range rover		2008	8	auto(s6)	4	12
	134		land rover	range rover		1999	8	auto(14)	4	11
	135		lincoln	navigator 2wd		1999	8	auto(14)	r	11
	136		lincoln	navigator 2wd		1999	8	auto(14)	r	11
	137		lincoln	navigator 2wd		2008	8	auto(16)	r	12
##	138		mercury	mountaineer 4wd		1999	6	auto(15)	4	14
	139		mercury	mountaineer 4wd		2008	6	auto(15)	4	13
	140		mercury	mountaineer 4wd		2008	8	auto(16)	4	13
	141		mercury	mountaineer 4wd		1999	8	auto(14)	4	13
	142		nissan	altima		1999		manual(m5)	f f	21
##	143	143	nissan	altima	2.4	1999	4	auto(14)	I	19

##	144		nissan	altima		2008	4	auto(av)	f	23
##	145		nissan	altima		2008	4	manual(m6)	f	23
##	146		nissan	altima		2008	6	manual(m6)	f	19
##	147		nissan	altima		2008	6	auto(av)	f	19
##	148		nissan	maxima			6	auto(14)	f	18
##	149	149	nissan	maxima	3.0	1999	6	manual(m5)	f	19
##	150	150	nissan	maxima		2008	6	auto(av)	f	19
##	151		nissan	pathfinder 4wd		1999	6	auto(14)	4	14
##	152		nissan	pathfinder 4wd		1999	6	manual(m5)	4	15
##	153		nissan	pathfinder 4wd		2008	6	auto(15)	4	14
##	154	154	nissan	pathfinder 4wd	5.6	2008	8	auto(s5)	4	12
##	155	155	pontiac	grand prix	3.1	1999	6	auto(14)	f	18
##	156	156	pontiac	grand prix	3.8	1999	6	auto(14)	f	16
##	157	157	pontiac	grand prix	3.8	1999	6	auto(14)	f	17
##	158	158	pontiac	grand prix	3.8	2008	6	auto(14)	f	18
##	159	159	pontiac	grand prix	5.3	2008	8	auto(s4)	f	16
##	160	160	subaru	forester awd	2.5	1999	4	manual(m5)	4	18
##	161	161	subaru	forester awd	2.5	1999	4	auto(14)	4	18
##	162	162	subaru	forester awd	2.5	2008	4	manual(m5)	4	20
##	163	163	subaru	forester awd	2.5	2008	4	manual(m5)	4	19
##	164	164	subaru	forester awd	2.5	2008	4	auto(14)	4	20
##	165	165	subaru	forester awd	2.5	2008	4	auto(14)	4	18
##	166	166	subaru	impreza awd	2.2	1999	4	auto(14)	4	21
##	167	167	subaru	impreza awd	2.2	1999	4	manual(m5)	4	19
##	168	168	subaru	impreza awd	2.5	1999	4	manual(m5)	4	19
##	169	169	subaru	impreza awd	2.5	1999	4	auto(14)	4	19
##	170	170	subaru	impreza awd	2.5	2008	4	auto(s4)	4	20
##	171	171	subaru	impreza awd	2.5	2008	4	auto(s4)	4	20
##	172	172	subaru	impreza awd	2.5	2008	4	manual(m5)	4	19
##	173	173	subaru	impreza awd	2.5	2008	4	manual(m5)	4	20
##	174	174	toyota	4runner 4wd	2.7	1999	4	manual(m5)	4	15
##	175	175	toyota	4runner 4wd	2.7	1999	4	auto(14)	4	16
##	176	176	toyota	4runner 4wd	3.4	1999	6	auto(14)	4	15
##	177	177	toyota	4runner 4wd	3.4	1999	6	manual(m5)	4	15
##	178	178	toyota	4runner 4wd	4.0	2008	6	auto(15)	4	16
##	179	179	toyota	4runner 4wd	4.7	2008	8	auto(15)	4	14
##	180	180	toyota	camry	2.2	1999	4	manual(m5)	f	21
##	181	181	toyota	camry	2.2	1999	4	auto(14)	f	21
##	182	182	toyota	camry	2.4	2008	4	manual(m5)	f	21
##	183	183	toyota	camry	2.4	2008	4	auto(15)	f	21
##	184	184	toyota	camry	3.0	1999	6	auto(14)	f	18
##	185	185	toyota	camry	3.0	1999	6	manual(m5)	f	18
##	186	186	toyota	camry	3.5	2008	6	auto(s6)	f	19
##	187	187	toyota	camry solara	2.2	1999	4	auto(14)	f	21
##	188	188	toyota	camry solara	2.2	1999	4	manual(m5)	f	21
##	189	189	toyota	camry solara	2.4	2008	4	manual(m5)	f	21
##	190	190	toyota	camry solara	2.4	2008	4	auto(s5)	f	22
##	191	191	toyota	camry solara	3.0	1999	6	auto(14)	f	18
##	192	192	toyota	camry solara		1999	6	manual(m5)	f	18
	193		toyota	camry solara		2008	6	auto(s5)	f	18
	194		toyota	corolla		1999	4	auto(13)	f	24
	195		toyota	corolla		1999	4	auto(14)	f	24
	196		toyota	corolla		1999	4	manual(m5)	f	26
	197		toyota	corolla		2008		manual(m5)	f	28
	-				_			,		-

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## 198 198
                  tovota
                                           corolla
                                                      1.8 2008
                                                                  4
                                                                       auto(14)
                                                                                      26
## 199 199
                  toyota land cruiser wagon 4wd
                                                                                   4
                                                                                      11
                                                      4.7 1999
                                                                  8
                                                                       auto(14)
                                                                       auto(s6)
                                                                                      13
## 200 200
                  toyota land cruiser wagon 4wd
                                                      5.7 2008
## 201 201
                                                                                      15
                                toyota tacoma 4wd
                                                      2.7 1999
                                                                  4 manual(m5)
                  toyota
## 202 202
                  toyota
                                toyota tacoma 4wd
                                                      2.7 1999
                                                                       auto(14)
                                                                                      16
## 203 203
                                                      2.7 2008
                                                                                   4
                                                                                      17
                  toyota
                                toyota tacoma 4wd
                                                                  4 manual(m5)
## 204 204
                                                                                      15
                  toyota
                                toyota tacoma 4wd
                                                      3.4 1999
                                                                    manual(m5)
## 205 205
                  toyota
                                toyota tacoma 4wd
                                                      3.4 1999
                                                                  6
                                                                       auto(14)
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                                                                                      15
## 206 206
                  toyota
                                toyota tacoma 4wd
                                                      4.0 2008
                                                                  6
                                                                    manual(m6)
                                                                                      15
## 207 207
                                                                                      16
                  toyota
                                toyota tacoma 4wd
                                                      4.0 2008
                                                                       auto(15)
## 208 208
                                               gti
                                                      2.0 1999
                                                                    manual(m5)
                                                                                   f
                                                                                      21
              volkswagen
## 209 209
                                                                                      19
                                                      2.0 1999
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              volkswagen
                                               gti
                                                                       auto(14)
## 210 210
              volkswagen
                                                      2.0 2008
                                                                    manual(m6)
                                                                                   f
                                                                                      21
                                               gti
## 211 211
              volkswagen
                                                                                   f
                                                                                      22
                                               gti
                                                      2.0 2008
                                                                       auto(s6)
## 212 212
                                                      2.8 1999
                                                                    manual(m5)
                                                                                   f
                                                                                      17
              volkswagen
                                               gti
## 213 213
              volkswagen
                                             jetta
                                                      1.9
                                                          1999
                                                                    manual(m5)
                                                                                   f
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## 214 214
                                                                                   f
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              volkswagen
                                                      2.0 1999
                                                                    manual(m5)
                                             jetta
                                                                                      19
## 215 215
              volkswagen
                                                      2.0 1999
                                                                       auto(14)
                                             jetta
## 216 216
                                                      2.0 2008
                                                                                      22
              volkswagen
                                                                       auto(s6)
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                                             jetta
## 217 217
              volkswagen
                                             jetta
                                                      2.0 2008
                                                                  4 manual(m6)
                                                                                   f
                                                                                      21
## 218 218
              volkswagen
                                             jetta
                                                      2.5 2008
                                                                       auto(s6)
                                                                                   f
                                                                                      21
## 219 219
              volkswagen
                                                      2.5 2008
                                                                    manual(m5)
                                                                                      21
                                             jetta
## 220 220
                                                                                   f
                                                                                      16
              volkswagen
                                             jetta
                                                      2.8 1999
                                                                  6
                                                                       auto(14)
## 221 221
                                                      2.8 1999
                                                                                   f
                                                                                      17
              volkswagen
                                             jetta
                                                                  6 manual(m5)
                                                                                      35
## 222 222
              volkswagen
                                       new beetle
                                                      1.9 1999
                                                                    manual(m5)
                                                                                   f
## 223 223
              volkswagen
                                       new beetle
                                                      1.9 1999
                                                                       auto(14)
                                                                                   f
                                                                                      29
## 224 224
              volkswagen
                                                      2.0
                                                          1999
                                                                                   f
                                                                                      21
                                        new beetle
                                                                    manual(m5)
## 225 225
                                                                                   f
                                                                                      19
              volkswagen
                                        new beetle
                                                      2.0
                                                          1999
                                                                       auto(14)
## 226 226
                                                                                      20
                                                      2.5 2008
                                                                                   f
              volkswagen
                                        new beetle
                                                                    manual(m5)
## 227 227
              volkswagen
                                        new beetle
                                                      2.5 2008
                                                                  5
                                                                       auto(s6)
                                                                                   f
                                                                                      20
## 228 228
              volkswagen
                                            passat
                                                      1.8 1999
                                                                  4
                                                                    manual(m5)
                                                                                   f
                                                                                      21
## 229 229
              volkswagen
                                                      1.8 1999
                                                                       auto(15)
                                                                                   f
                                                                                      18
                                            passat
## 230 230
                                                                                      19
              volkswagen
                                                      2.0 2008
                                                                       auto(s6)
                                            passat
## 231 231
                                                      2.0 2008
                                                                                      21
              volkswagen
                                                                    manual(m6)
                                                                                   f
                                            passat
## 232 232
              volkswagen
                                                      2.8
                                                          1999
                                                                       auto(15)
                                                                                   f
                                                                                      16
                                            passat
##
  233 233
                                                                                   f
                                                                                      18
              volkswagen
                                            passat
                                                      2.8 1999
                                                                  6 manual(m5)
##
   234 234
              volkswagen
                                            passat
                                                      3.6 2008
                                                                       auto(s6)
                                                                                   f
                                                                                      17
##
       hwy fl
                     class
## 1
        29
                  compact
##
   2
        29
                  compact
##
             p
                  compact
##
   4
        30
                  compact
##
   5
        26
             p
                  compact
##
  6
        26
                   compact
## 7
        27
                  compact
             p
## 8
        26
             р
                   compact
##
  9
        25
                  compact
             p
## 10
        28
             p
                   compact
##
   11
        27
                  compact
             p
        25
##
   12
                  compact
##
   13
        25
                   compact
## 14
        25
             p
                  compact
## 15
        25
                  compact
             p
## 16
        24
                  midsize
             р
```

##	17	25	р	midsize
##	18	23	p	midsize
##	19	20	r	suv
##	20	15	е	suv
##	21	20	r	suv
##	22	17	r	suv
##	23	17	r	suv
##	24	26	р	2seater
##	25	23	p	2seater
##	26	26	p	2seater
##	27	25	p	2seater
##	28	24	p	2seater
##	29	19	r	suv
##	30	14	е	suv
##	31	15	r	suv
##	32	17	d	suv
##	33	27	r	midsize
##	34	30	r	midsize
##	35	26	r	midsize
##	36	29	r	midsize
##	37	26	r	midsize
##	38	24	r	minivan
##	39	24	r	minivan
##	40	22	r	minivan
##	41	22	r	minivan
##	42	24	r	minivan
##	43	24	r	minivan
##	44	17	e	minivan
##	45	22	r	minivan
##	46	21		minivan
##	47	23	r	minivan
##	48	23	r	minivan
##	49	19	r	
##	50	18	r	pickup
	51	17	r	pickup
##	52	17	r	pickup
##			r	pickup
##	53	19	r	pickup
##	54	19	r	pickup
##	55	12	е	pickup
##	56	17	r	pickup
##	57	15	r	pickup
##	58	17	r	suv
##	59	17	r	suv
##	60	12	е	suv
##	61	17	r	suv
##	62	16	r	suv
##	63	18	r	suv
##	64	15	r	suv
##	65	16	r	pickup
##	66	12	е	pickup
##	67	17	r	pickup
##	68	17	r	pickup
##	69	16	r	pickup
##	70	12	е	pickup

```
## 71
        15
            r
                   pickup
## 72
        16
             r
                   pickup
##
  73
        17
             r
                   pickup
##
  74
        15
             r
                   pickup
##
   75
        17
                       suv
##
   76
        17
                       suv
##
   77
        18
                       suv
## 78
        17
                       suv
##
   79
        19
             r
                       suv
##
  80
        17
                       suv
##
   81
        19
             r
                       suv
##
  82
        19
                       suv
##
   83
        17
             r
                       suv
##
  84
        17
                   pickup
##
  85
        17
                   pickup
             r
## 86
        16
             r
                   pickup
##
  87
        16
                   pickup
##
   88
        17
                   pickup
##
   89
        15
                   pickup
## 90
        17
                   pickup
##
  91
        26
             r subcompact
## 92
             r subcompact
## 93
             r subcompact
        26
##
  94
        24
             r subcompact
## 95
        21
             r subcompact
##
  96
            r subcompact
## 97
        23
            r subcompact
##
   98
        22
             r subcompact
        20
## 99
             p subcompact
## 100
        33
             r subcompact
        32
## 101
             r subcompact
##
  102
        32
             r subcompact
##
  103
             p subcompact
## 104
        32
            r subcompact
   105
        34
             r subcompact
##
        36
## 106
             r subcompact
## 107
        36
             c subcompact
## 108
        29
             p subcompact
        26
## 109
             r
                  midsize
## 110
        27
                  midsize
             r
## 111
                  midsize
## 112
        31
                  midsize
## 113
        26
                  midsize
## 114
        26
                  midsize
## 115
        28
             r
                  midsize
## 116
        26
             r subcompact
## 117
        29
             r subcompact
## 118
        28
             r subcompact
## 119
        27
             r subcompact
## 120
        24
             r subcompact
        24
## 121
             r subcompact
        24
## 122
             r subcompact
## 123
        22
             d
                       suv
## 124
        19
                       suv
```

```
## 125
        20
            r
                       suv
## 126
        17
             r
                       suv
## 127
        12
             е
                       suv
## 128
        19
             r
                       suv
## 129
        18
             r
                       suv
## 130
        14
                       suv
## 131
        15
                       suv
             p
## 132
        18
             r
                       suv
## 133
        18
             r
                       suv
## 134
        15
             p
                       suv
## 135
        17
             r
                       suv
## 136
        16
             p
                       suv
## 137
        18
            r
                       suv
## 138
        17
                       suv
## 139
        19
                       suv
             r
## 140
        19
             r
                       suv
## 141
        17
                       suv
             r
## 142
        29
             r
                  compact
## 143
        27
                  compact
             r
## 144
        31
                  midsize
## 145
        32
             r
                  midsize
## 146
        27
                  midsize
## 147
        26
                  midsize
             р
        26
## 148
             r
                  midsize
## 149
        25
                  midsize
            r
## 150
        25
             p
                  midsize
## 151
        17
                       suv
## 152
        17
             r
                       suv
        20
## 153
                       suv
## 154
        18
                       suv
             p
## 155
        26
             r
                  midsize
## 156
        26
             p
                  midsize
## 157
        27
                  midsize
## 158
        28
                  midsize
            r
## 159
        25
             p
                  midsize
## 160
        25
                       suv
             r
## 161
        24
                       suv
## 162
        27
             r
                       suv
## 163
        25
             р
                       suv
## 164
        26
             r
                       suv
        23
## 165
             р
                       suv
        26
## 166
             r subcompact
##
  167
        26
             r subcompact
## 168
        26
             r subcompact
## 169
        26
             r subcompact
## 170
        25
                  compact
             р
## 171
        27
                  compact
            r
## 172
        25
             p
                  compact
## 173
        27
            r
                  compact
## 174
        20
                       suv
## 175
        20
            r
                       suv
## 176
        19
                       suv
## 177
        17
            r
                       suv
## 178
        20
                       suv
```

```
## 179
         17
             r
                       suv
## 180
        29
             r
                  midsize
## 181
                  midsize
         27
## 182
        31
                  midsize
             r
##
   183
        31
             r
                  midsize
## 184
        26
                  midsize
             r
## 185
         26
                  midsize
             r
## 186
        28
                  midsize
             r
## 187
         27
             r
                  compact
## 188
        29
                   compact
             r
   189
         31
            r
                   compact
## 190
        31
                   compact
##
   191
         26
                   compact
            r
         26
## 192
                   compact
## 193
        27
                   compact
             r
## 194
         30
             r
                   compact
## 195
        33
                   compact
             r
##
   196
         35
             r
                   compact
## 197
        37
                  compact
             r
## 198
        35
                   compact
##
   199
         15
             r
                       suv
## 200
         18
                       suv
## 201
        20
                   pickup
             r
        20
## 202
             r
                   pickup
## 203
        22
             r
                   pickup
## 204
        17
             r
                   pickup
## 205
        19
                   pickup
##
   206
        18
                   pickup
             r
         20
## 207
                   pickup
## 208
         29
             r
                   compact
## 209
         26
                   compact
## 210
        29
             p
                   compact
##
   211
         29
                   compact
             p
## 212
        24
                   compact
             r
## 213
        44
                   compact
## 214
        29
                   compact
             r
## 215
        26
                   compact
## 216
        29
                   compact
             p
## 217
         29
             p
                   compact
## 218
        29
                   compact
             r
## 219
         29
             r
                   compact
## 220
        23
             r
                   compact
## 221
         24
                   compact
             r
## 222
         44
             d subcompact
## 223
         41
             d subcompact
## 224
         29
             r subcompact
## 225
        26
             r subcompact
## 226
         28
             r subcompact
   227
        29
##
             r subcompact
##
   228
        29
                  midsize
             р
##
   229
        29
                  midsize
             р
## 230
        28
                  midsize
             р
## 231
        29
             p
                  midsize
## 232
        26
                  midsize
             р
```

## 233 26 p midsize ## 234 26 p midsize

b. Which variables from mpg dataset are categorical?