

1. hwy가 10 이상인 것들만 추려내시오.

- baseR 방식:

```
> filter(mpg, hwy >= 10)
# A tibble: 234 x 11
  manufacturer model displ year cyl trans drv cty hwy
  <chr>         <chr> <dbl> <int> <int> <chr> <chr> <int> <int>
1 audi         a4      1.8  1999     4 auto~ f    18    29
2 audi         a4      1.8  1999     4 manu~ f    21    29
3 audi         a4      2    2008     4 manu~ f    20    31
4 audi         a4      2    2008     4 auto~ f    21    30
5 audi         a4      2.8  1999     6 auto~ f    16    26
6 audi         a4      2.8  1999     6 manu~ f    18    26
7 audi         a4      3.1  2008     6 auto~ f    18    27
8 audi         a4 qu~    1.8  1999     4 manu~ 4    18    26
9 audi         a4 qu~    1.8  1999     4 auto~ 4    16    25
10 audi        a4 qu~    2    2008     4 manu~ 4    20    28
# ... with 224 more rows, and 2 more variables: fl <chr>,
#   class <chr>
```

1. hwy가 10 이상인 것들만 추려내시오.

- tidyR 방식:

```
> mpg %>% filter(hwy >= 10)
# A tibble: 234 x 11
  manufacturer model   displ  year   cyl trans drv   cty   hwy
    <chr>         <chr>   <dbl> <int> <int> <chr> <chr> <int> <int>
1 audi          a4       1.8   1999     4 auto~ f     18    29
2 audi          a4       1.8   1999     4 manu~ f     21    29
3 audi          a4       2     2008     4 manu~ f     20    31
4 audi          a4       2     2008     4 auto~ f     21    30
5 audi          a4       2.8   1999     6 auto~ f     16    26
6 audi          a4       2.8   1999     6 manu~ f     18    26
7 audi          a4       3.1   2008     6 auto~ f     18    27
8 audi          a4 qu~   1.8   1999     4 manu~ 4     18    26
9 audi          a4 qu~   1.8   1999     4 auto~ 4     16    25
10 audi          a4 qu~   2     2008     4 manu~ 4     20    28
# ... with 224 more rows, and 2 more variables: fl <chr>,
#   class <chr>
```

2. year가 2000년 이후인 것만 추려내시오.

- baseR 방식: `> mpg %>% filter(year > 2000)`

```
# A tibble: 117 x 11
  manufacturer model displ year cyl trans drv cty hwy
  <chr>         <chr> <dbl> <int> <int> <chr> <chr> <int> <int>
1 audi         a4      2    2008     4 manu~ f    20    31
2 audi         a4      2    2008     4 auto~ f    21    30
3 audi         a4     3.1    2008     6 auto~ f    18    27
4 audi         a4 qu~    2    2008     4 manu~ 4    20    28
5 audi         a4 qu~    2    2008     4 auto~ 4    19    27
6 audi         a4 qu~    3.1    2008     6 auto~ 4    17    25
7 audi         a4 qu~    3.1    2008     6 manu~ 4    15    25
8 audi         a6 qu~    3.1    2008     6 auto~ 4    17    25
9 audi         a6 qu~    4.2    2008     8 auto~ 4    16    23
10 chevrolet    c1500~    5.3    2008     8 auto~ r    14    20
# ... with 107 more rows, and 2 more variables: fl <chr>,
#   class <chr>
```

2. year가 2000년 이후인 것만 추려내시오.

- tidyR 방식:

```
> filter(mpg, year > 2000)
# A tibble: 117 x 11
  manufacturer model   displ  year   cyl trans drv   cty   hwy
    <chr>         <chr>   <dbl> <int> <int> <chr> <chr> <int> <int>
1 audi          a4         2     2008     4 manu~ f     20    31
2 audi          a4         2     2008     4 auto~ f     21    30
3 audi          a4        3.1     2008     6 auto~ f     18    27
4 audi          a4 qu~     2     2008     4 manu~ 4     20    28
5 audi          a4 qu~     2     2008     4 auto~ 4     19    27
6 audi          a4 qu~     3.1    2008     6 auto~ 4     17    25
7 audi          a4 qu~     3.1    2008     6 manu~ 4     15    25
8 audi          a6 qu~     3.1    2008     6 auto~ 4     17    25
9 audi          a6 qu~     4.2    2008     8 auto~ 4     16    23
10 chevrolet     c1500~     5.3    2008     8 auto~ r     14    20
# ... with 107 more rows, and 2 more variables: fl <chr>,
#   class <chr>
```

3. cty가 10 미만이고, year가 2000년 미만인 것들만 추려내시오.

• baseR 방식:

```
> filter(mpg, cty < 10 & year < 2000)
# A tibble: 0 x 11
#   ... with 11 variables: manufacturer <chr>, model <chr>,
#     displ <dbl>, year <int>, cyl <int>, trans <chr>, drv <chr>,
#     cty <int>, hwy <int>, fl <chr>, class <chr>
```

• tidyR 방식:

```
> mpg %>% filter( cty < 10 & year < 2000)
# A tibble: 0 x 11
#   ... with 11 variables: manufacturer <chr>, model <chr>,
#     displ <dbl>, year <int>, cyl <int>, trans <chr>, drv <chr>,
#     cty <int>, hwy <int>, fl <chr>, class <chr>
```

4. displ이 1.8인 경우만 추려내시오.

- baseR 방식:

```
> filter(mpg, displ == 1.8)
# A tibble: 14 x 11
  manufacturer model displ year cyl trans drv cty hwy
  <chr>         <chr> <dbl> <int> <int> <chr> <chr> <int> <int>
1 audi         a4      1.8  1999    4 auto~ f    18    29
2 audi         a4      1.8  1999    4 manu~ f    21    29
3 audi         a4 qu~  1.8  1999    4 manu~ 4    18    26
4 audi         a4 qu~  1.8  1999    4 auto~ 4    16    25
5 honda        civic   1.8  2008    4 manu~ f    26    34
6 honda        civic   1.8  2008    4 auto~ f    25    36
7 honda        civic   1.8  2008    4 auto~ f    24    36
8 toyota        corol~  1.8  1999    4 auto~ f    24    30
9 toyota        corol~  1.8  1999    4 auto~ f    24    33
10 toyota        corol~  1.8  1999    4 manu~ f    26    35
11 toyota        corol~  1.8  2008    4 manu~ f    28    37
12 toyota        corol~  1.8  2008    4 auto~ f    26    35
13 volkswagen    passat  1.8  1999    4 manu~ f    21    29
14 volkswagen    passat  1.8  1999    4 auto~ f    18    29
# ... with 2 more variables: fl <chr>, class <chr>
```

4. displ이 1.8인 경우만 추려내시오.

- tidyR 방식: `> mpg %>% filter(displ == 1.8)`

```
# A tibble: 14 x 11
  manufacturer model displ year cyl trans drv cty hwy
  <chr>         <chr> <dbl> <int> <int> <chr> <chr> <int> <int>
1 audi         a4      1.8  1999   4 auto~ f    18    29
2 audi         a4      1.8  1999   4 manu~ f    21    29
3 audi         a4 qu~  1.8  1999   4 manu~ 4    18    26
4 audi         a4 qu~  1.8  1999   4 auto~ 4    16    25
5 honda        civic  1.8  2008   4 manu~ f    26    34
6 honda        civic  1.8  2008   4 auto~ f    25    36
7 honda        civic  1.8  2008   4 auto~ f    24    36
8 toyota        corol~  1.8  1999   4 auto~ f    24    30
9 toyota        corol~  1.8  1999   4 auto~ f    24    33
10 toyota        corol~  1.8  1999   4 manu~ f    26    35
11 toyota        corol~  1.8  2008   4 manu~ f    28    37
12 toyota        corol~  1.8  2008   4 auto~ f    26    35
13 volkswagen    passat  1.8  1999   4 manu~ f    21    29
14 volkswagen    passat  1.8  1999   4 auto~ f    18    29
# ... with 2 more variables: fl <chr>, class <chr>
```

5. displ이 2.0이고 cyl이 6, 8인 경우만 추려내시오.

- baseR 방식:

```
> filter(mpg, displ == 2.0 & cyl == c(6, 8))  
# A tibble: 0 x 11  
# ... with 11 variables: manufacturer <chr>, model <chr>,  
#   displ <dbl>, year <int>, cyl <int>, trans <chr>, drv <chr>,  
#   cty <int>, hwy <int>, fl <chr>, class <chr>
```
- tidyR 방식:

```
> mpg %>% filter( displ == 2.0 & cyl == c(6, 8))  
# A tibble: 0 x 11  
# ... with 11 variables: manufacturer <chr>, model <chr>,  
#   displ <dbl>, year <int>, cyl <int>, trans <chr>, drv <chr>,  
#   cty <int>, hwy <int>, fl <chr>, class <chr>
```