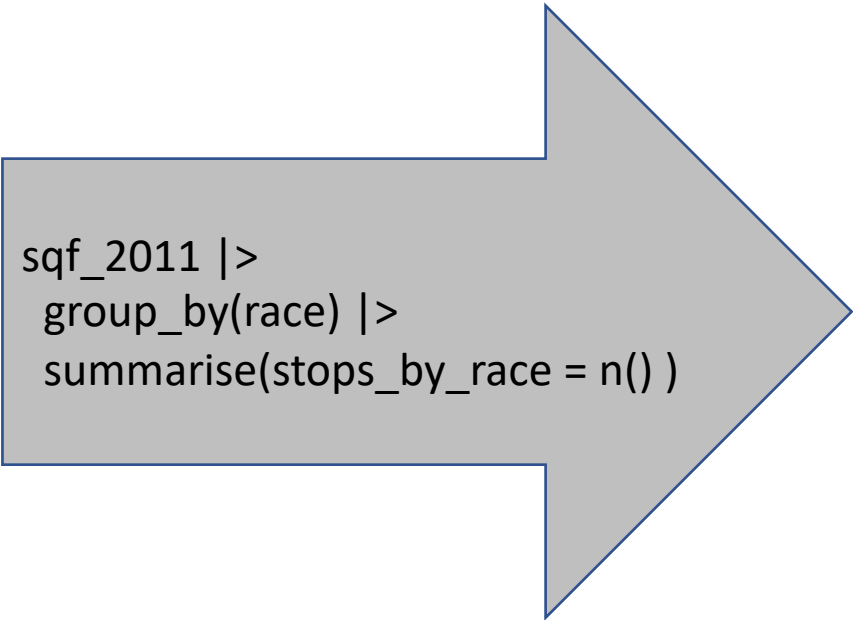


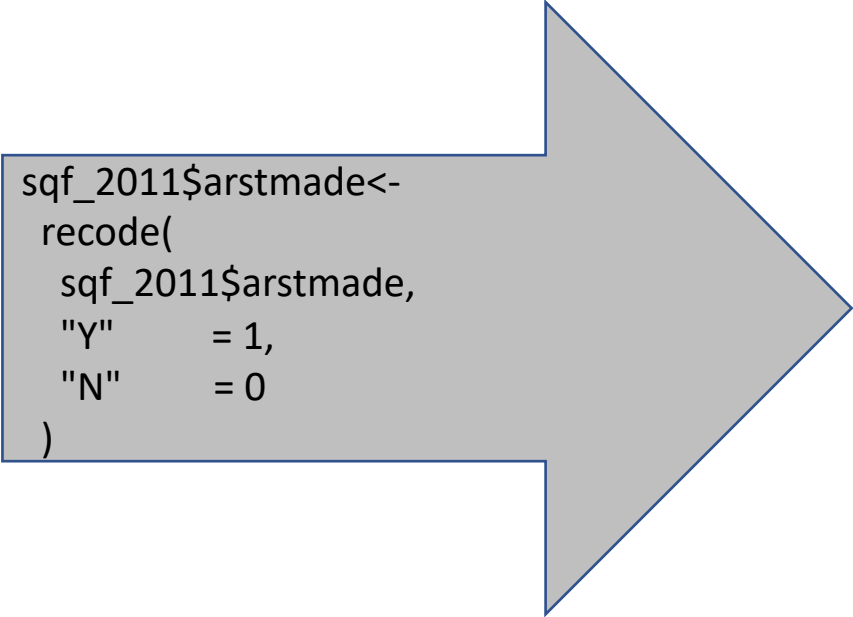
```
sqf_2011
```

```
sqf_2011 <-  
sqf_2011 |>  
  select( sex, race, arstmade  
    )
```

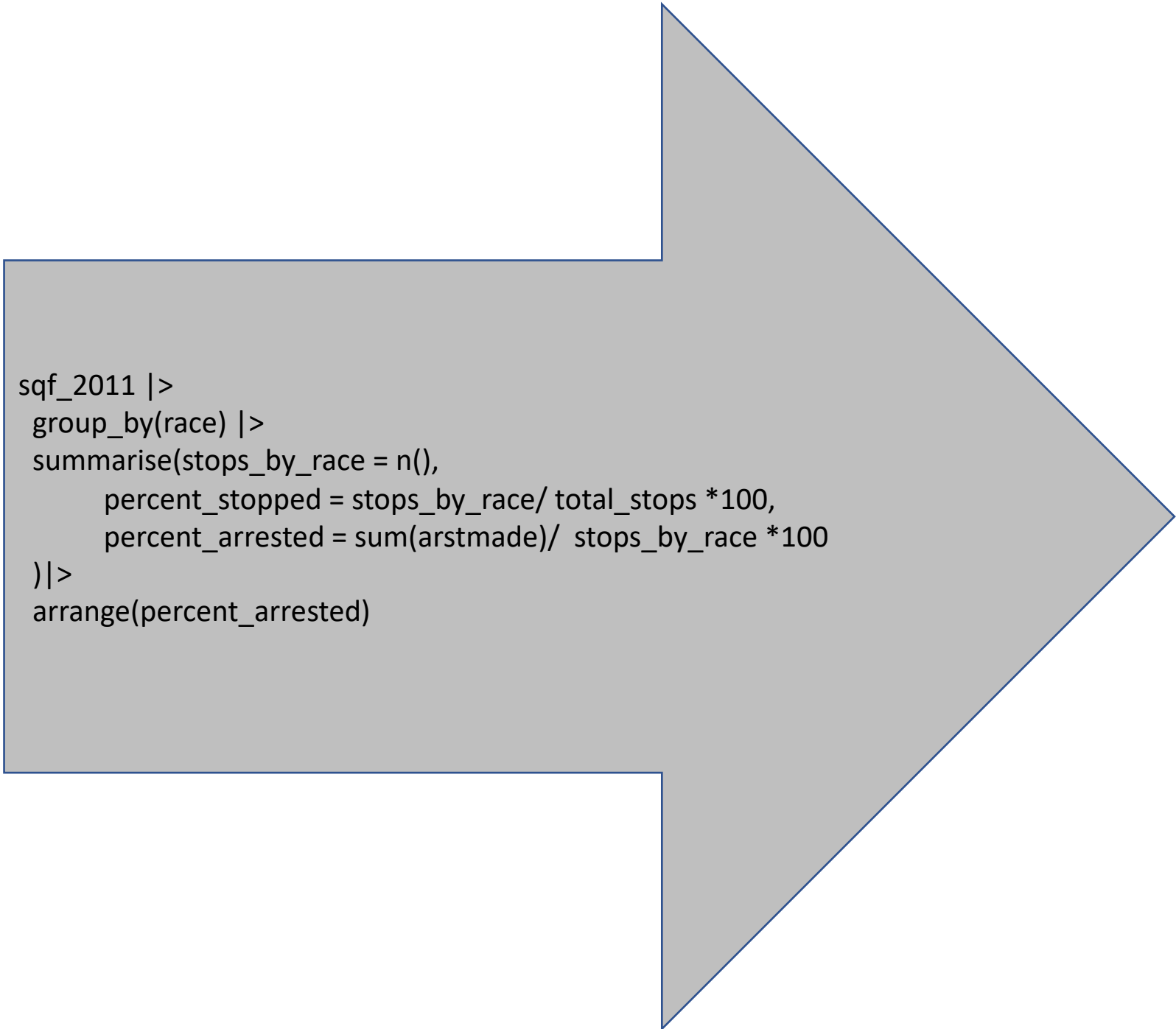
```
sqf_2011$race<-  
  recode(  
    sqf_2011$race,  
    "A" =   "API",  
    "B"   = "Black",  
    "I"=    "Am Indian",  
    "P"=    "Hispanic",  
    "Q"=    "Hispanic",  
    "W"=    "White",  
    "X"=    "Unknown",  
    "Z"=    "Other",  
    .default = NA_character_  
  )
```



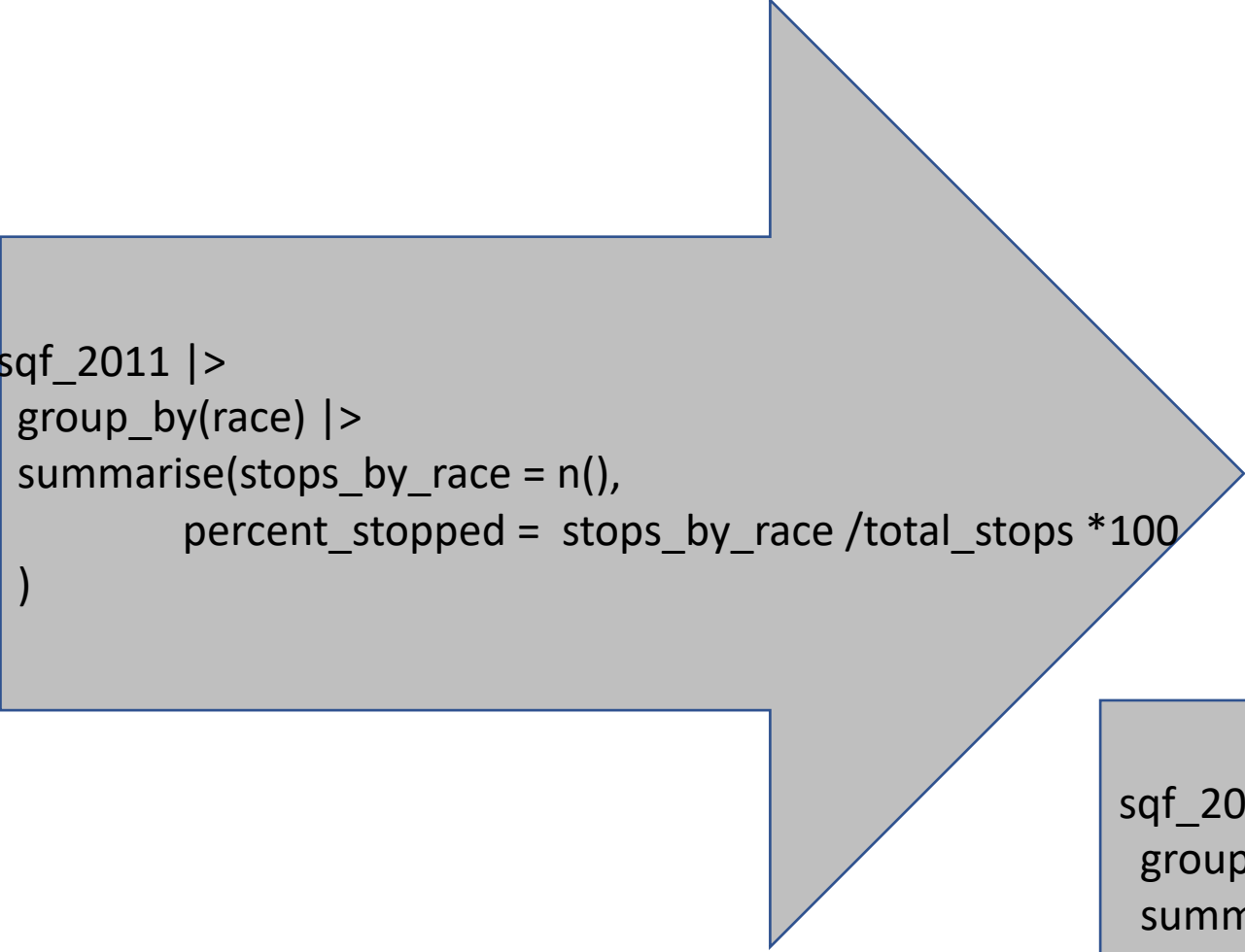
```
sqf_2011 |>  
  group_by(race) |>  
  summarise(stops_by_race = n() )
```



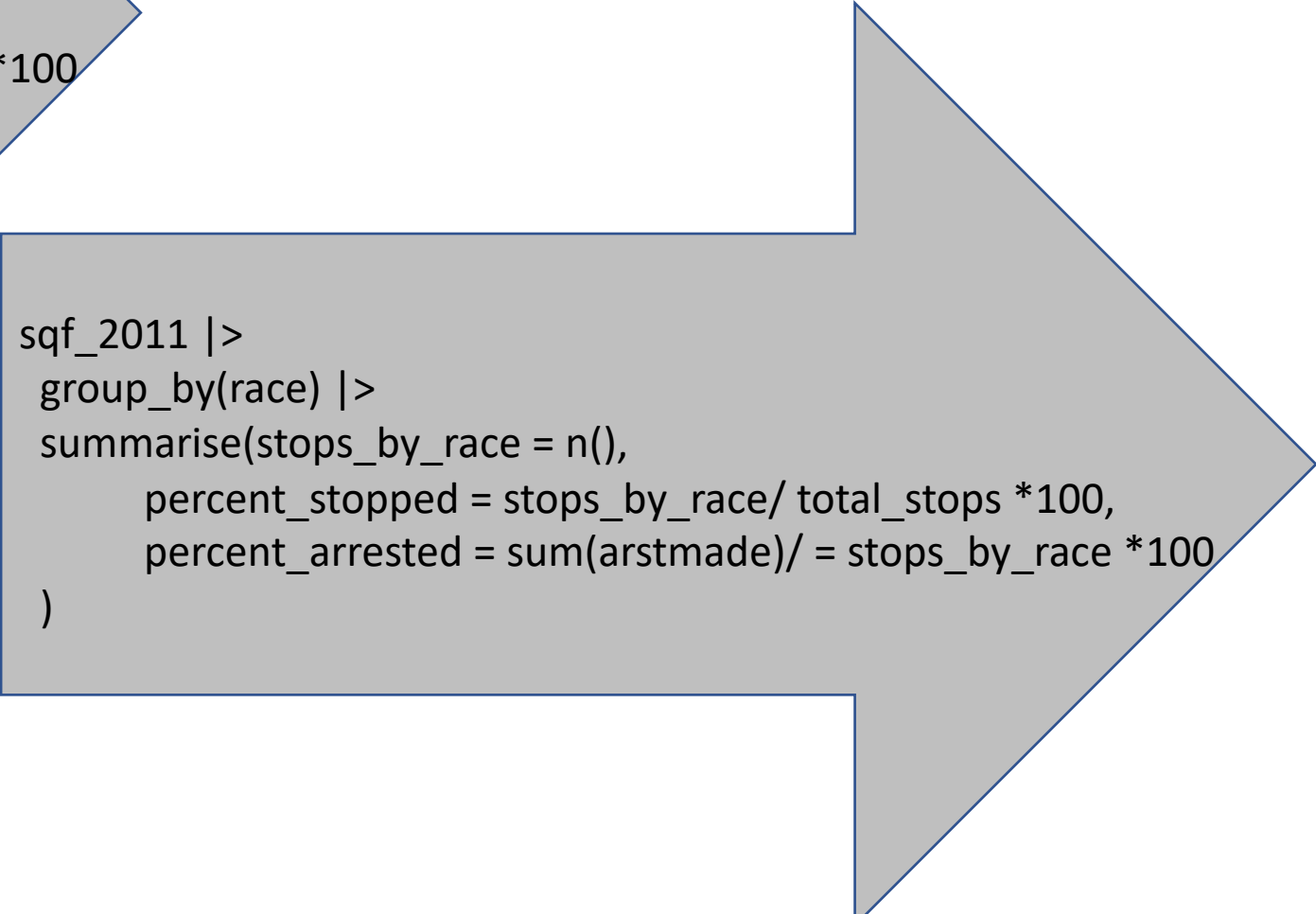
```
sqf_2011$arstmade<-  
  recode(  
    sqf_2011$arstmade,  
    "Y"      = 1,  
    "N"      = 0  
  )
```




```
sqf_2011 |>  
  group_by(race) |>  
  summarise(stops_by_race = n(),  
            percent_stopped = stops_by_race/ total_stops *100,  
            percent_arrested = sum(arstmade)/ stops_by_race *100  
  )|>  
  arrange(percent_arrested)
```



```
sqf_2011 |>
  group_by(race) |>
  summarise(stops_by_race = n(),
            percent_stopped = stops_by_race / total_stops * 100
  )
```



```
sqf_2011 |>
  group_by(race) |>
  summarise(stops_by_race = n(),
            percent_stopped = stops_by_race / total_stops * 100,
            percent_arrested = sum(arstmade) / stops_by_race * 100
  )
```



```
sqf_2011 |>
  group_by(race) |>
  summarise(stops_by_race = n(),
            percent_stopped = stops_by_race / total_stops *100,
            percent_arrested = sum(arstmade)/ stops_by_race ) *100
  )|>
  ggplot( aes( x = race, y = percent_stopped)) +
  geom_col(fill="red")+
  theme_minimal()
```

```
sqf_2011 |>
  group_by(race) |>
  summarise(stops_by_race = n(),
            percent_stopped = stops_by_race / total_stops *100,
            percent_arrested = sum(arstmade)/ stops_by_race *100
  )|>
  arrange(percent_arrested) |>
  ggplot()+
  geom_col(aes(x=race,y=percent_arrested), fill="blue", width = 0.25, position = position_nudge(x=0.15))+
  geom_col(aes(x=race,y=percent_stopped), fill="red", width = 0.25, position = position_nudge(x=-0.15))+
  labs(
    y="",
    title = "Percent Stopped and Percent Arrested",
    subtitle = "NYC SQF 2011 Data",
    caption = "The red bars show percent of people stopped of the total.\n The blue bars show the percent arrested by stop.")+
  theme_minimal()
```