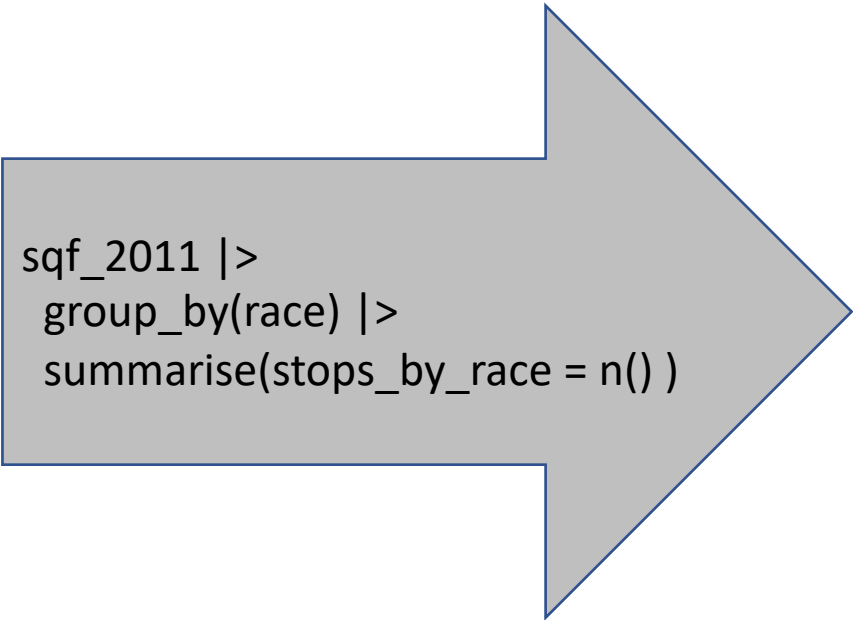


```
graph LR; A[sqf_2011] --> B[sqf_2011$race <- recode(sqf_2011$race, "A" = "API", "B" = "Black", "I" = "Am Indian", "P" = "Hispanic", "Q" = "Hispanic", "W" = "White", "X" = "Unknown", "Z" = "Other", .default = NA_character_)]; B --> C[sqf_2011 <- sqf_2011 |> select(sex, race, arstmade)];
```

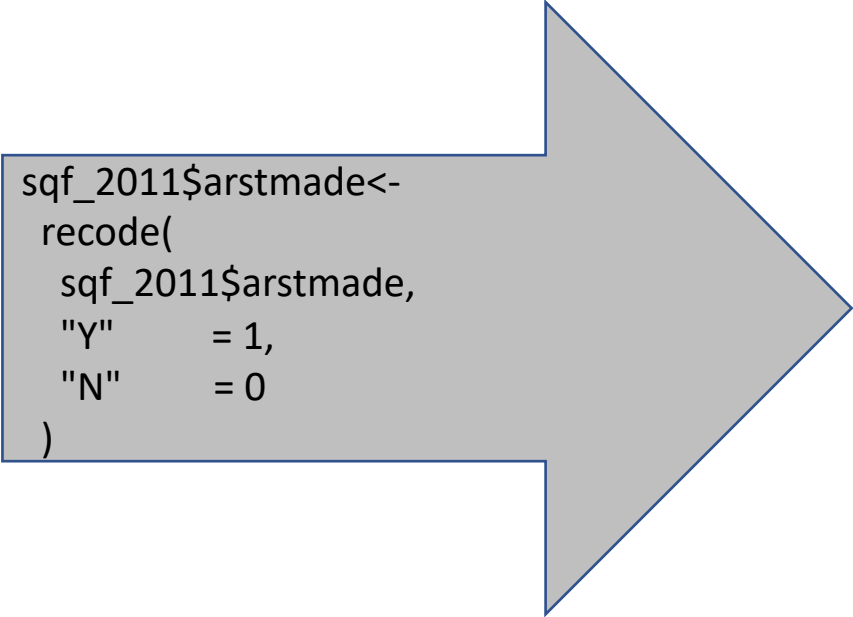
sqf_2011

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

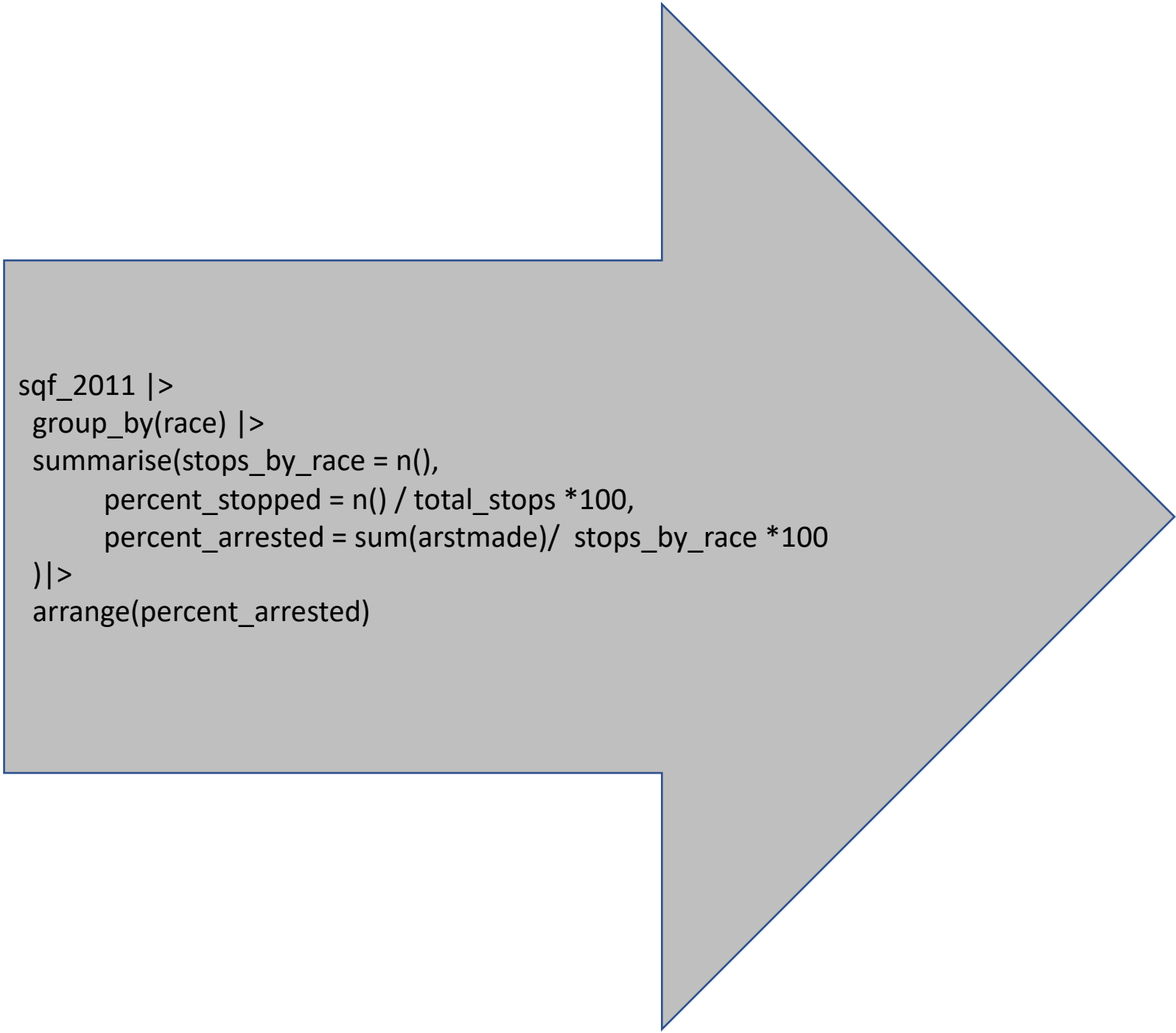
```
sqf_2011$race<-  
recode(  
  sqf_2011$race,  
  "A" =   "API",  
  "B"    = "Black",  
  "I"=    "Am Indian",  
  "P"=    "Hispanic",  
  "Q"=    "Hispanic",  
  "W"=    "White",  
  "X"=    "Unknown",  
  "Z"=    "Other",  
  .default = NA_character_  
)
```



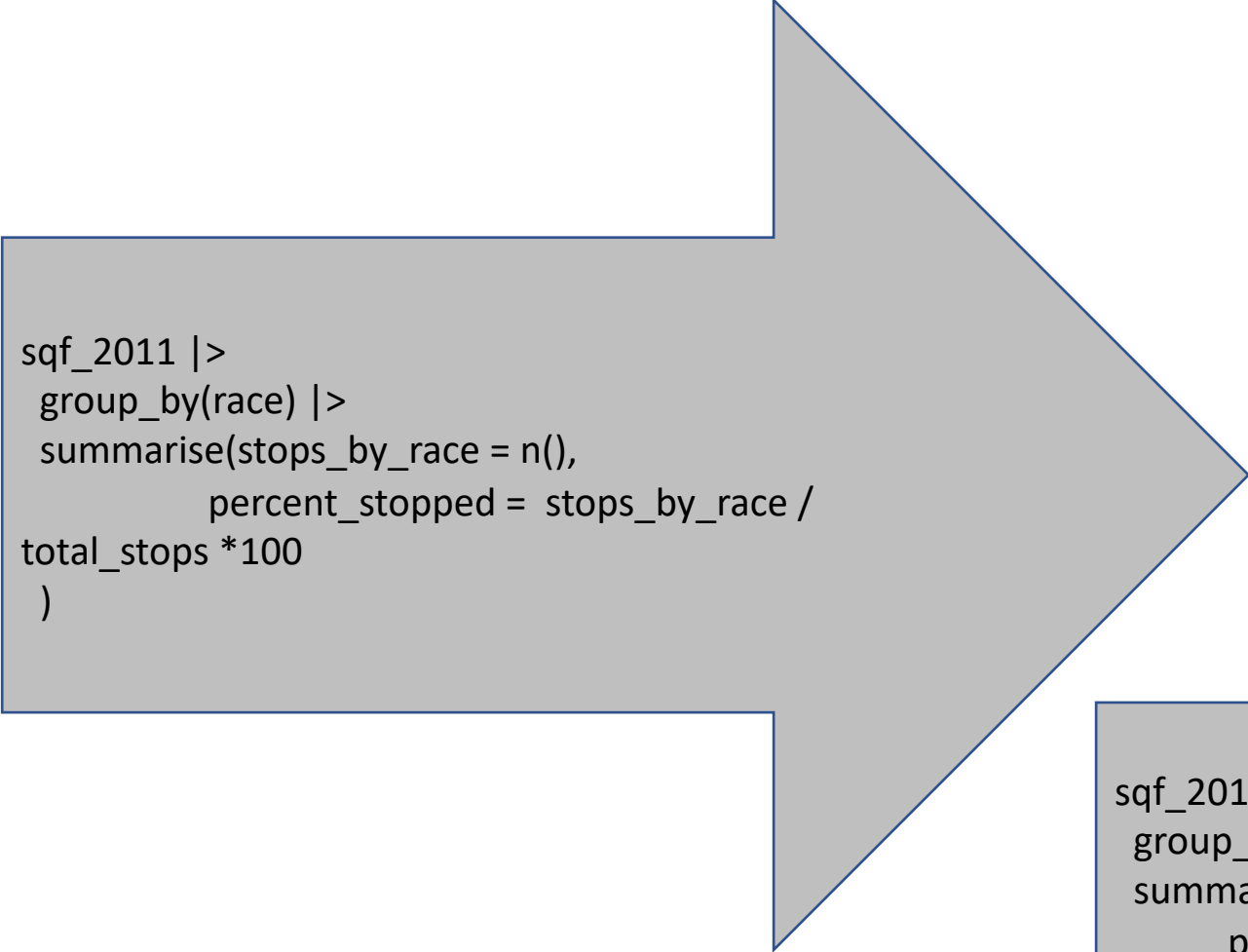
```
sqf_2011 |>  
  group_by(race) |>  
  summarise(stops_by_race = n() )
```




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




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