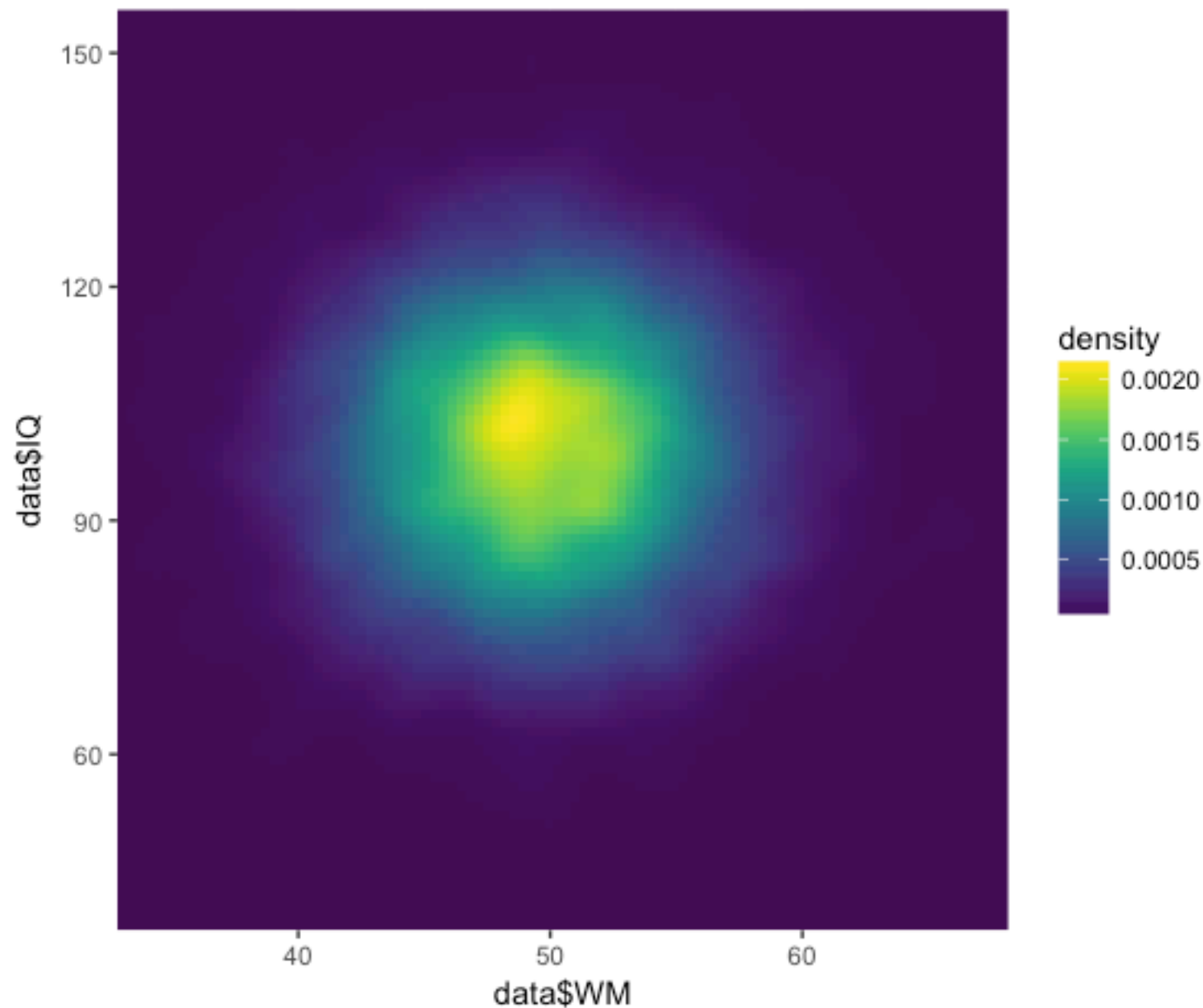


And as a Density Heat Map



```
> ggplot(data, aes(x = WM, y = IQ)) + stat_density_2d(aes(fill = ..density..), geom = 'raster', contour = FALSE) + scale_fill_viridis() + coord_cartesian(expand = FALSE)
```

If IQ and WM were perfectly (positively) correlated, we'd have something like this...

```
> #creating two perfectly  
correlated variables  
> set.seed(1234)  
> mysigma <- matrix(c(1,1,1,1),  
2,2)  
> x1 <- mvrnorm(n = 1000,  
c(5.3,10), mysigma)  
> x5 <- as.data.frame(x1)  
> colnames(x5) <- c("IQ", "WM")  
  
> ggplot(x5, aes(x = WM, y = IQ))  
+ stat_density_2d(aes(fill  
= ..density..), geom = 'raster',  
contour = FALSE) +  
scale_fill_viridis() +  
coord_cartesian(expand = FALSE)
```

