

Contents

```
print(opts_chunk$get())

## $eval
## [1] TRUE
##
## $echo
## [1] TRUE
##
## $results
## [1] "markup"
##
## $tidy
## [1] FALSE
##
## $tidy.opts
## NULL
##
## $prompt
## [1] FALSE
##
## $comment
## [1] "##"
##
## $highlight
## [1] TRUE
##
## $size
## [1] "normalsize"
##
## $background
## [1] "#F7F7F7"
##
## $cache
## [1] FALSE
##
## $cache.path
## [1] "cache/"
##
## $cache.vars
## NULL
##
## $cache.lazy
## [1] TRUE
```

```
##  
## $dependson  
## NULL  
##  
## $autodep  
## [1] FALSE  
##  
## $fig.keep  
## [1] "high"  
##  
## $fig.show  
## [1] "asis"  
##  
## $fig.align  
## [1] "default"  
##  
## $fig.path  
## [1] "figure/"  
##  
## $dev  
## [1] "pdf"  
##  
## $dev.args  
## NULL  
##  
## $dpi  
## [1] 72  
##  
## $fig.ext  
## NULL  
##  
## $fig.width  
## [1] 7  
##  
## $fig.height  
## [1] 7  
##  
## $fig.env  
## [1] "figure"  
##  
## $fig.cap  
## NULL  
##  
## $fig.scap  
## NULL
```

```
##  
## $fig.lp  
## [1] "fig:  
##  
## $fig.subcap  
## NULL  
##  
## $fig.pos  
## [1] ""  
##  
## $out.width  
## [1] "\maxwidth"  
##  
## $out.height  
## NULL  
##  
## $out.extra  
## NULL  
##  
## $external  
## [1] TRUE  
##  
## $sanitize  
## [1] FALSE  
##  
## $interval  
## [1] 1  
##  
## $aniopts  
## [1] "controls,loop"  
##  
## $warning  
## [1] TRUE  
##  
## $error  
## [1] TRUE  
##  
## $message  
## [1] TRUE  
##  
## $ref.label  
## NULL  
##  
## $child  
## NULL
```

```

## 
## $engine
## [1] "R"
##
## $split
## [1] FALSE
##
## $include
## [1] TRUE
##
## $purl
## [1] TRUE

library("data.table")
library("ggplot2")
df<-data.table(expand.grid(seq(10000,200000,1000),seq(10000,200000,2000),seq(100000,400000,50000)),setnames(df,c("Var1","Var2","Var3"),c("ad","fm","value")))
df<-df[ad+fm<value*.9&ad+fm>=value*.6]
df<-df[,`P Value`:=paste0(round(value/1000,2),"k")]
df<-df[,`ad Amount`:=paste0(round(ad/1000,2),"k")]
df<-df[,ratio:=(ad+fm)/value]

#ggplot(df[value %in% seq(100000,400000,50000)&fm==50000],aes(x=ratio,y=ad,group=value,color=Var1))
#  geom_line()

```