

DOE GENOMICS:GT
ACCELERATING
DISCOVERY FOR ENERGY
AND ENVIRONMENT

OFFICE OF SCIENCE
U.S. DEPARTMENT OF ENERGY

BERKELEY LAB

AEKazakov@1b1.gov

The screenshot shows the RStudio IDE. The top pane displays the 'Environment' window, which lists objects in the global environment. The objects include 'data', 'data2', 'data3', 'data4', 'data5', 'data6', 'data7', 'data8', 'data9', 'data10', 'data11', 'data12', 'data13', 'data14', 'data15', 'data16', 'data17', 'data18', 'data19', 'data20', 'data21', 'data22', 'data23', 'data24', 'data25', 'data26', 'data27', 'data28', 'data29', 'data30', 'data31', 'data32', 'data33', 'data34', 'data35', 'data36', 'data37', 'data38', 'data39', 'data40', 'data41', 'data42', 'data43', 'data44', 'data45', 'data46', 'data47', 'data48', 'data49', 'data50', 'data51', 'data52', 'data53', 'data54', 'data55', 'data56', 'data57', 'data58', 'data59', 'data60', 'data61', 'data62', 'data63', 'data64', 'data65', 'data66', 'data67', 'data68', 'data69', 'data70', 'data71', 'data72', 'data73', 'data74', 'data75', 'data76', 'data77', 'data78', 'data79', 'data80', 'data81', 'data82', 'data83', 'data84', 'data85', 'data86', 'data87', 'data88', 'data89', 'data90', 'data91', 'data92', 'data93', 'data94', 'data95', 'data96', 'data97', 'data98', 'data99', 'data100'. The bottom pane shows the 'Source' window with a script containing R code for data manipulation, including comments and function calls like 'data <- read.csv()' and 'data2 <- read.csv()'. The code is as follows:

```
# R script for data manipulation
# Read data from CSV files
data <- read.csv("data.csv")
data2 <- read.csv("data2.csv")
data3 <- read.csv("data3.csv")
data4 <- read.csv("data4.csv")
data5 <- read.csv("data5.csv")
data6 <- read.csv("data6.csv")
data7 <- read.csv("data7.csv")
data8 <- read.csv("data8.csv")
data9 <- read.csv("data9.csv")
data10 <- read.csv("data10.csv")
data11 <- read.csv("data11.csv")
data12 <- read.csv("data12.csv")
data13 <- read.csv("data13.csv")
data14 <- read.csv("data14.csv")
data15 <- read.csv("data15.csv")
data16 <- read.csv("data16.csv")
data17 <- read.csv("data17.csv")
data18 <- read.csv("data18.csv")
data19 <- read.csv("data19.csv")
data20 <- read.csv("data20.csv")
data21 <- read.csv("data21.csv")
data22 <- read.csv("data22.csv")
data23 <- read.csv("data23.csv")
data24 <- read.csv("data24.csv")
data25 <- read.csv("data25.csv")
data26 <- read.csv("data26.csv")
data27 <- read.csv("data27.csv")
data28 <- read.csv("data28.csv")
data29 <- read.csv("data29.csv")
data30 <- read.csv("data30.csv")
data31 <- read.csv("data31.csv")
data32 <- read.csv("data32.csv")
data33 <- read.csv("data33.csv")
data34 <- read.csv("data34.csv")
data35 <- read.csv("data35.csv")
data36 <- read.csv("data36.csv")
data37 <- read.csv("data37.csv")
data38 <- read.csv("data38.csv")
data39 <- read.csv("data39.csv")
data40 <- read.csv("data40.csv")
data41 <- read.csv("data41.csv")
data42 <- read.csv("data42.csv")
data43 <- read.csv("data43.csv")
data44 <- read.csv("data44.csv")
data45 <- read.csv("data45.csv")
data46 <- read.csv("data46.csv")
data47 <- read.csv("data47.csv")
data48 <- read.csv("data48.csv")
data49 <- read.csv("data49.csv")
data50 <- read.csv("data50.csv")
data51 <- read.csv("data51.csv")
data52 <- read.csv("data52.csv")
data53 <- read.csv("data53.csv")
data54 <- read.csv("data54.csv")
data55 <- read.csv("data55.csv")
data56 <- read.csv("data56.csv")
data57 <- read.csv("data57.csv")
data58 <- read.csv("data58.csv")
data59 <- read.csv("data59.csv")
data60 <- read.csv("data60.csv")
data61 <- read.csv("data61.csv")
data62 <- read.csv("data62.csv")
data63 <- read.csv("data63.csv")
data64 <- read.csv("data64.csv")
data65 <- read.csv("data65.csv")
data66 <- read.csv("data66.csv")
data67 <- read.csv("data67.csv")
data68 <- read.csv("data68.csv")
data69 <- read.csv("data69.csv")
data70 <- read.csv("data70.csv")
data71 <- read.csv("data71.csv")
data72 <- read.csv("data72.csv")
data73 <- read.csv("data73.csv")
data74 <- read.csv("data74.csv")
data75 <- read.csv("data75.csv")
data76 <- read.csv("data76.csv")
data77 <- read.csv("data77.csv")
data78 <- read.csv("data78.csv")
data79 <- read.csv("data79.csv")
data80 <- read.csv("data80.csv")
data81 <- read.csv("data81.csv")
data82 <- read.csv("data82.csv")
data83 <- read.csv("data83.csv")
data84 <- read.csv("data84.csv")
data85 <- read.csv("data85.csv")
data86 <- read.csv("data86.csv")
data87 <- read.csv("data87.csv")
data88 <- read.csv("data88.csv")
data89 <- read.csv("data89.csv")
data90 <- read.csv("data90.csv")
data91 <- read.csv("data91.csv")
data92 <- read.csv("data92.csv")
data93 <- read.csv("data93.csv")
data94 <- read.csv("data94.csv")
data95 <- read.csv("data95.csv")
data96 <- read.csv("data96.csv")
data97 <- read.csv("data97.csv")
data98 <- read.csv("data98.csv")
data99 <- read.csv("data99.csv")
data100 <- read.csv("data100.csv")
```

[illegible]

Examples of RpoN-regulated genes that were not confirmed by experiment:

- DVU2822 - TRAP dicarboxylate family transporter
- DVU3234 - flagellar biosynthesis protein FliR
- DVU382 - sensor protein ZraS
- DVUA0143 - nif-specific regulatory protein

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