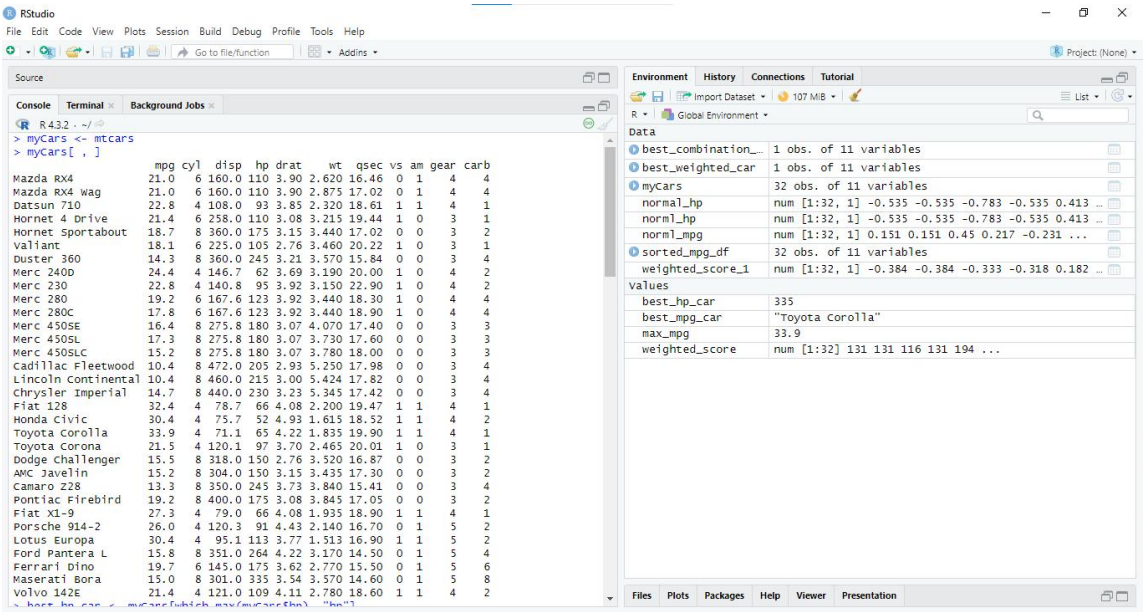
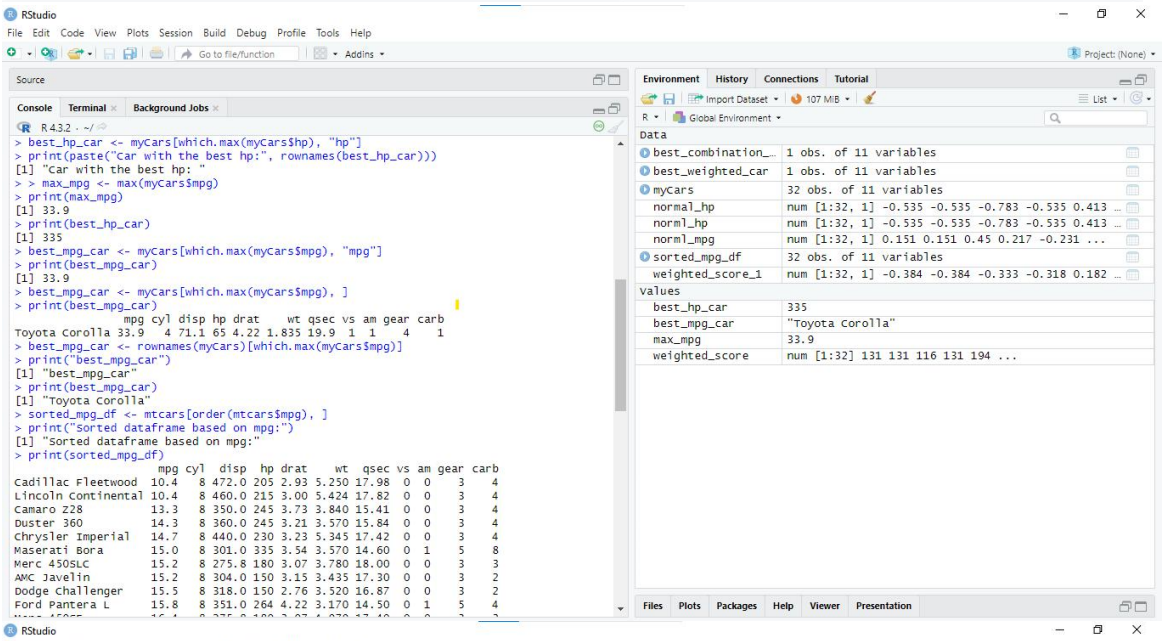
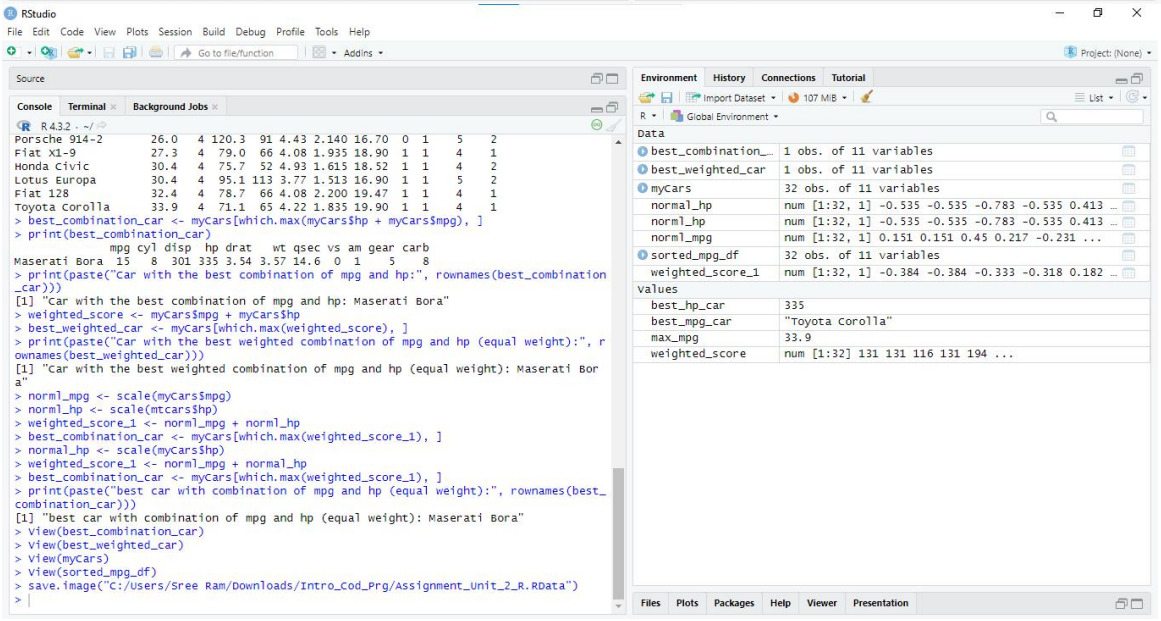

RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs
R 4.3.2 · ~/
> myCars <- mtcars
> myCars[,]
mpg cyl disp hp drat wt qsec vs am gear carb
Mazda RX4 21.0 6 160.0 110 3.90 2.620 16.46 0 1 4 4
Mazda RX4 Wag 21.0 6 160.0 110 3.90 2.875 17.02 0 1 4 4
Datsun 710 22.8 4 108.0 93 3.85 2.320 18.61 1 1 4 1
Hornet 4 Drive 21.4 6 258.0 110 3.08 3.215 19.44 1 0 3 1
Hornet Sportabout 18.7 8 360.0 175 3.15 3.440 17.02 0 0 3 2
Valiant 18.1 6 225.0 105 2.76 3.460 20.22 1 0 3 1
Duster 360 14.3 8 360.0 245 3.21 3.570 15.84 0 0 3 4
Merc 240D 24.4 4 146.7 62 3.69 3.190 20.00 1 0 4 2
Merc 230 22.8 4 140.8 95 3.92 3.150 22.90 1 0 4 2
Merc 280 19.2 6 167.6 123 3.92 3.440 18.30 1 0 4 4
Merc 280C 17.8 6 167.6 123 3.92 3.440 18.90 1 0 4 4
Merc 450SE 16.4 8 275.8 180 3.07 4.070 17.40 0 0 3 3
Merc 450SL 17.3 8 275.8 180 3.07 3.730 17.60 0 0 3 3
Merc 450SLC 15.2 8 275.8 180 3.07 3.780 18.00 0 0 3 3
Cadillac Fleetwood 10.4 8 472.0 205 2.93 5.250 17.98 0 0 3 4
Lincoln Continental 10.4 8 460.0 215 3.00 5.424 17.82 0 0 3 4
Chrysler Imperial 14.7 8 440.0 230 3.23 5.345 17.42 0 0 3 4
Fiat 128 32.4 4 78.7 66 4.08 2.200 19.47 1 1 4 1
Honda Civic 30.4 4 75.7 52 4.93 1.615 18.52 1 1 4 2
Toyota Corolla 33.9 4 71.1 65 4.22 1.835 19.90 1 1 4 1
Toyota Corona 21.5 4 120.1 97 3.70 2.465 20.01 1 0 3 1
Dodge Challenger 15.5 8 318.0 150 2.76 3.520 16.87 0 0 3 2
AMC Javelin 15.2 8 304.0 150 3.15 3.435 17.30 0 0 3 2
Camaro Z28 13.3 8 350.0 245 3.73 3.840 15.41 0 0 3 4
Pontiac Firebird 19.2 8 400.0 175 3.08 3.845 17.05 0 0 3 2
Fiat X1-9 27.3 4 79.0 66 4.08 1.935 18.90 1 1 4 1
Porsche 914-2 26.0 4 120.3 91 4.43 2.140 16.70 0 1 5 2
Lotus Europa 30.4 4 95.1 113 3.77 1.513 16.90 1 1 5 2
Ford Pantera L 15.8 8 351.0 264 4.22 3.170 14.50 0 1 5 4
Ferrari Dino 19.7 6 145.0 175 3.62 2.770 15.50 0 1 5 6
Maserati Bora 15.0 8 301.0 335 3.54 3.570 14.60 0 1 5 8
Volvo 142E 21.4 4 121.0 109 4.11 2.780 18.60 1 1 4 2
Environment History Connections Tutorial
Import Dataset 107 MiB
List
R Global Environment
Data
best_combination_... 1 obs. of 11 variables
best_weighted_car 1 obs. of 11 variables
myCars 32 obs. of 11 variables
normal_hp num [1:32, 1] -0.535 -0.535 -0.783 -0.535 0.413 ...
norml_hp num [1:32, 1] -0.535 -0.535 -0.783 -0.535 0.413 ...
norml_mpg num [1:32, 1] 0.151 0.151 0.45 0.217 -0.231 ...
sorted_mpg_df 32 obs. of 11 variables
weighted_score_1 num [1:32, 1] -0.384 -0.384 -0.333 -0.318 0.182 ...
Values
best_hp_car 335
best_mpg_car "Toyota Corolla"
max_mpg 33.9
weighted_score num [1:32] 131 131 116 131 194 ...
Files Plots Packages Help Viewer Presentation


RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs
R 4.3.2 · ~/
> best_hp_car <- myCars[which.max(myCars$hp), "hp"]
> print(paste("Car with the best hp:", rownames(best_hp_car)))
[1] "Car with the best hp: "
> > max_mpg <- max(myCars$mpg)
> print(max_mpg)
[1] 33.9
> print(best_hp_car)
[1] 335
> best_mpg_car <- myCars[which.max(myCars$mpg), "mpg"]
> print(best_mpg_car)
[1] 33.9
> best_mpg_car <- myCars[which.max(myCars$mpg),]
> print(best_mpg_car)
mpg cyl disp hp drat wt qsec vs am gear carb
Toyota Corolla 33.9 4 71.1 65 4.22 1.835 19.9 1 1 4 1
> best_mpg_car <- rownames(myCars)[which.max(myCars$mpg)]
> print("best_mpg_car")
[1] "best_mpg_car"
> print(best_mpg_car)
[1] "Toyota Corolla"
> sorted_mpg_df <- mtcars[order(mtcars$mpg),]
> print("Sorted dataframe based on mpg:")
[1] "Sorted dataframe based on mpg:"
> print(sorted_mpg_df)
mpg cyl disp hp drat wt qsec vs am gear carb
Cadillac Fleetwood 10.4 8 472.0 205 2.93 5.250 17.98 0 0 3 4
Lincoln Continental 10.4 8 460.0 215 3.00 5.424 17.82 0 0 3 4
Camaro Z28 13.3 8 350.0 245 3.73 3.840 15.41 0 0 3 4
Duster 360 14.3 8 360.0 245 3.21 3.570 15.84 0 0 3 4
Chrysler Imperial 14.7 8 440.0 230 3.23 5.345 17.42 0 0 3 4
Maserati Bora 15.0 8 301.0 335 3.54 3.570 14.60 0 1 5 8
Merc 450SLC 15.2 8 275.8 180 3.07 3.780 18.00 0 0 3 3
AMC Javelin 15.2 8 304.0 150 3.15 3.435 17.30 0 0 3 2
Dodge Challenger 15.5 8 318.0 150 2.76 3.520 16.87 0 0 3 2
Ford Pantera L 15.8 8 351.0 264 4.22 3.170 14.50 0 1 5 4
Environment History Connections Tutorial
Import Dataset 107 MiB
List
R Global Environment
Data
best_combination_... 1 obs. of 11 variables
best_weighted_car 1 obs. of 11 variables
myCars 32 obs. of 11 variables
normal_hp num [1:32, 1] -0.535 -0.535 -0.783 -0.535 0.413 ...
norml_hp num [1:32, 1] -0.535 -0.535 -0.783 -0.535 0.413 ...
norml_mpg num [1:32, 1] 0.151 0.151 0.45 0.217 -0.231 ...
sorted_mpg_df 32 obs. of 11 variables
weighted_score_1 num [1:32, 1] -0.384 -0.384 -0.333 -0.318 0.182 ...
Values
best_hp_car 335
best_mpg_car "Toyota Corolla"
max_mpg 33.9
weighted_score num [1:32] 131 131 116 131 194 ...
Files Plots Packages Help Viewer Presentation


RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs
R 4.3.2 · ~/
Porsche 914-2 26.0 4 120.3 91 4.43 2.140 16.70 0 1 5 2
Fiat X1-9 27.3 4 79.0 66 4.08 1.935 18.90 1 1 4 1
Honda Civic 30.4 4 75.7 52 4.93 1.615 18.52 1 1 4 2
Lotus Europa 30.4 4 95.1 113 3.77 1.513 16.90 1 1 5 2
Fiat 128 32.4 4 78.7 66 4.08 2.200 19.47 1 1 4 1
Toyota Corolla 33.9 4 71.1 65 4.22 1.835 19.90 1 1 4 1
> best_combination_car <- myCars[which.max(myCars$hp + myCars$mpg),]
> print(best_combination_car)
mpg cyl disp hp drat wt qsec vs am gear carb
Maserati Bora 15 8 301 335 3.54 3.57 14.6 0 1 5 8
> print(paste("Car with the best combination of mpg and hp:", rownames(best_combination_car)))
[1] "Car with the best combination of mpg and hp: Maserati Bora"
> weighted_score <- myCars$mpg + myCars$hp
> best_weighted_car <- myCars[which.max(weighted_score),]
> print(paste("Car with the best weighted combination of mpg and hp (equal weight):", rownames(best_weighted_car)))
[1] "Car with the best weighted combination of mpg and hp (equal weight): Maserati Bora"
> norml_mpg <- scale(myCars$mpg)
> norml_hp <- scale(mtcars$hp)
> weighted_score_1 <- norml_mpg + norml_hp
> best_combination_car <- myCars[which.max(weighted_score_1),]
> normal_hp <- scale(myCars$hp)
> weighted_score_1 <- norml_mpg + normal_hp
> best_combination_car <- myCars[which.max(weighted_score_1),]
> print(paste("best car with combination of mpg and hp (equal weight):", rownames(best_combination_car)))
[1] "best car with combination of mpg and hp (equal weight): Maserati Bora"
> View(best_combination_car)
> View(best_weighted_car)
> View(myCars)
> View(sorted_mpg_df)
> save.image("C:/Users/Sree Ram/Downloads/Intro_Cod_Prg/Assignment_Unit_2_R.RData")
Environment History Connections Tutorial
Import Dataset 107 MiB
List
R Global Environment
Data
best_combination_... 1 obs. of 11 variables
best_weighted_car 1 obs. of 11 variables
myCars 32 obs. of 11 variables
normal_hp num [1:32, 1] -0.535 -0.535 -0.783 -0.535 0.413 ...
norml_hp num [1:32, 1] -0.535 -0.535 -0.783 -0.535 0.413 ...
norml_mpg num [1:32, 1] 0.151 0.151 0.45 0.217 -0.231 ...
sorted_mpg_df 32 obs. of 11 variables
weighted_score_1 num [1:32, 1] -0.384 -0.384 -0.333 -0.318 0.182 ...
Values
best_hp_car 335
best_mpg_car "Toyota Corolla"
max_mpg 33.9
weighted_score num [1:32] 131 131 116 131 194 ...
Files Plots Packages Help Viewer Presentation