

# R Generate and Combine Fixed and Random Matrix

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### Generate Matrixes

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**Create a N by 2 Matrix from 3 arrays** Names of each array become row names automatically.

```
ar_row_one <- c(-1,+1)
ar_row_two <- c(-3,-2)
ar_row_three <- c(0.35,0.75)

mt_n_by_2 <- rbind(ar_row_one, ar_row_two, ar_row_three)
kable(mt_n_by_2) %>%
  kable_styling_fc()
```

ar_row_one	-1.00	1.00
ar_row_two	-3.00	-2.00
ar_row_three	0.35	0.75

**Generate Random Matrixes** Random draw from the normal distribution, random draw from the uniform distribution, and combine resulting matrixes.

```
# Generate 15 random normal, put in 5 rows, and 3 columns
mt_rnorm <- matrix(rnorm(15,mean=0,sd=1), nrow=5, ncol=3)

# Generate 15 random normal, put in 5 rows, and 3 columns
mt_runif <- matrix(runif(15,min=0,max=1), nrow=5, ncol=5)

# Combine
mt_rnorm_runif <- cbind(mt_rnorm, mt_runif)

# Display
kable(mt_rnorm_runif) %>%
  kable_styling_fc_wide()
```

-1.1858745	0.7264546	-2.1613182	0.2068418	0.9547658	0.6578097	0.2068418	0.9547658
-2.0055130	0.7136567	0.3952199	0.1146044	0.4543614	0.1698893	0.1146044	0.4543614
0.0075099	-0.6500629	-0.3948340	0.7504459	0.1925193	0.7443364	0.7504459	0.1925193
0.5194904	1.4986962	-0.3097584	0.9334095	0.4198546	0.0552954	0.9334095	0.4198546
-0.7462955	-1.4358281	1.3308266	0.4146961	0.1078679	0.5422845	0.4146961	0.1078679