

```
mat <- matrix(3:12, nrow = 3, byrow = TRUE)
print("Original Matrix:") print(mat)
transposed_mat <- t(mat) print("Transposed
Matrix:") print(transposed_mat) Output:
```

```
[1] "Original Matrix:"
```

```
  [,1] [,2] [,3] [,4] [,1]
```

```
3  4  5  6
```

```
[2,]  7  8  9 10
```

```
[3,] 11 12  3  4
```

```
[1] "Transposed Matrix:"
```

```
  [,1] [,2] [,3]
```

```
[1,]  3  7 11
```

```
[2,]  4  8 12
```

```
[3,]  5  9  3
```

```
[4,]  6 10  4
```

```
df <- data.frame(Player = c("Dhoni", "Jadeja"), Match1 = c(85, 90), Match2 = c(88, 92))
```

```
transposed_df <- t(df) print(transposed_df) Output:
```

```
[,1] [,2]
```

```
Player "Dhoni" "Jadeja"
```

```
Match1 "85"  "90"
```

```
Match2 "88"  "92"
```

```
library(tidyr) df <- data.frame(
  Student = c("Dhoni", "Jadeja"),
  Match1 = c(90, 85),
```

```

Match2 = c(95, 80)
)
long_df <- pivot_longer(df, cols = Match1:Match2, names_to = "Subject", values_to =
"Score") print(long_df)

```

Output

```
# A tibble: 4 x 3
```

```
  Student Subject Score
```

```
  <chr>   <chr>   <dbl>
```

```
1 Dhoni   Match1    90
```

```
2 Dhoni   Match2    95
```

```
3 Jadeja  Match1    85 4 Jadeja  Match2    80 library(data.table)
```

```

dt <- data.table(
  Names = c("Dhoni", "Jadeja"),
  Math = c(90, 85),
  Science = c(92, 88)
)

```

```
# Transpose only the numeric columns and set column names using the Names
```

```
column transposed_dt <- transpose(dt[, -1], make.names = FALSE)
```

```
setnames(transposed_dt, dt$Names) transposed_dt[, Subject := names(dt)[-1]]
```

```
setcolorder(transposed_dt, c("Subject", dt$Names))
```

```
print(transposed_dt)
```

Output:

Subject Dhoni Jadeja

1: Match1 90 85

2: Match2 92 88