

### Assignment 4.1

Ans

```
df1 = data.frame(CustId = c(1:6), Product = c(rep("TV", 3), rep("Radio", 3)))
```

```
df2 = data.frame(CustId = c(2, 4, 6), State = c(rep("Texas", 2), rep("NYC", 1)))
```

```
Left <- merge(df1, df2, by.x = "CustId")
```

Left

```
Right <- merge(df1, df2, by = "CustId", all = TRUE)
```

Right

```
merge(x = df1, y = df2, by = "CustId", all = TRUE)
```

```
merge(x = df1, y = df2, by = " CustId ", all.x = TRUE)
```

```
merge(x = df1, y = df2, by = " CustId ", all.y = TRUE)
```

```
merge(x = df1, y = df2, by = NULL)
```

```
full_join(df1, df2)
```

```
library(data.table)
```

```
dt1 <- data.table(df1, key = " CustId ")
```

```
dt2 <- data.table(df2, key = " CustId ")
```

```
joined.dt1.dt.2 <- dt1[dt2]
```