```
\label{eq:df1} \begin{split} & \text{df1} = \text{data.frame}(\text{CustId} = \text{c}(1\text{:}6), \text{Product} = \text{c}(\text{rep}(\text{"TV"}, 3), \text{rep}(\text{"Radio"}, 3))) \\ & \text{df2} = \text{data.frame}(\text{CustId} = \text{c}(2, 4, 6), \text{State} = \text{c}(\text{rep}(\text{"Texas"}, 2), \text{rep}(\text{"NYC"}, 1))) \\ & \text{df1} \ \# \text{left table} \\ & \text{df2} \ \# \text{right table} \end{split}
```

For the above given data frames and tables perform the following operations:

- 1. Return only the rows in which the left table have match
- 2. Return all rows from both tables, join records from the left which have matching keys in the right table.

```
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)))
```

library(dplyr)

#1. Return only the rows in which the left table have match

```
inner_join(df1,df2)
```

#. 2Return all rows from both tables, join records from the left which have matching keys in the right table.

```
df4<-merge(df1, df2, by = "CustId", all = TRUE)
```

df4

```
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)))

library(dplyr)
#1. Return only the rows in which the left table have match
inner_join(df1,df2)

#. Return all rows from both tables, join records from the left which have matching keys in the right
df4<-merge(df1, df2, by = "CustId", all = TRUE)
df4</pre>
```

```
> df4<-merge(df1, df2, by = "CustId", all = TRUE)
> df4
  CustId Product State
1    1    TV <NA>
2    2    TV Texas
3    3    TV <NA>
4    4   Radio Texas
5    5   Radio <NA>
6    6   Radio NYC
```