1. Swapping of two numbers without using third variable

```
> {
+
+   x <- as.integer(readline(prompt = "Enter x value :"))
+   y <- as.integer(readline(prompt = "Enter y value :"))
+
+   x = x + y
+   y = x - y
+   x = x - y
+
+   print(paste("After swap  x is :", x))
+   print(paste("After swap y is :", y))
+
+ }
```

Output

```
> {
+
+   x <- as.integer(readline(prompt = "Enter x value :"))
+   y <- as.integer(readline(prompt = "Enter y value :"))
+
+   x = x + y
+   y = x - y
+   x = x - y
+
+   print(paste("After swap  x is :", x))
+   print(paste("After swap y is :", y))
+
+ }
Enter x value :10
Enter y value :20
[1] "After swap  x is : 20"
[1] "After swap y is : 10"
>
```

2. Print 1 to 10 using while loop

```
>i <- 1
> while (i < 11) {
+ print(i)
+ i = i+1
+ }
```

Output

```
[1] 9
> i <- 1
> while (i < 11) {
+   print(i)
+   i <- i + 1
+ }
[1] 1
[1] 2
[1] 3
[1] 4
[1] 5
[1] 6
[1] 7
[1] 8
[1] 9
[1] 10
>
```

3. Web Application

```
>install.packages("shiny")
>library(shiny)
>ui <- fluidPage(
titlePanel(title = "First app….."),
sidebarLayout( position = "right",
sidebarPanel ("Sidebar panel, ….."),
mainPanel("Main panel, ….")
))
>server <-function (input, output) {}
>shinyApp (ui =ui , server = server)
```

Output