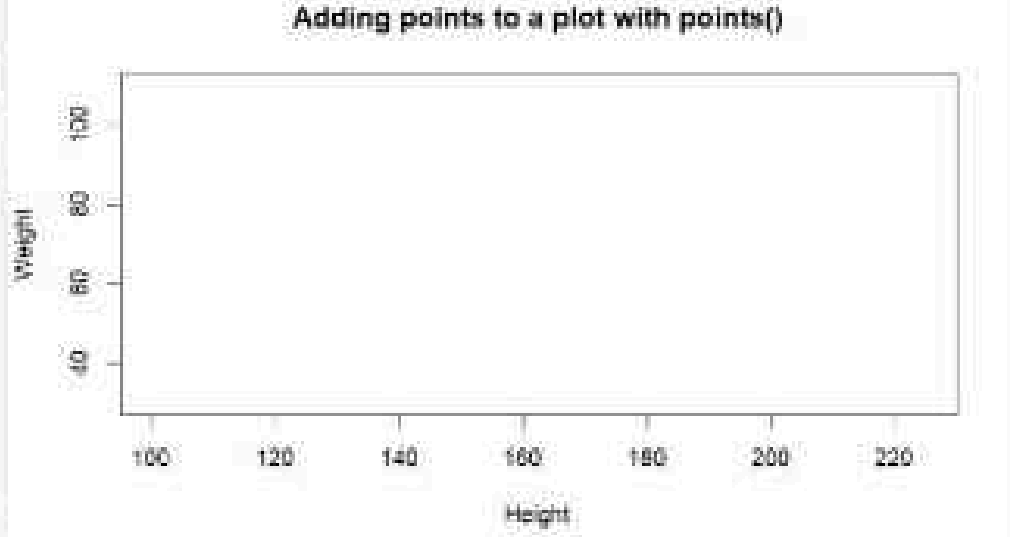
```
plot(x = 1,
     type = "n",
     xlim = c(100, 220),
     ylim =c(30, 110),
     pch = 16,
     xlab ="Height",
     ylab ="Weight",
     main = "Adding points to a plot with points()")
points (x = piratesSheight [piratesSex == 'male"],
        y =piratesSweight [piratesSex == 'male"],
        pch = 16,
```

```
> main = "Adding points to a plot with points()"
+
+      ylab ="Weight",
+
+      main = "Adding points to a plot with points()"
+ points (x = piratesSheight [piratesSex == "male"],
+
+         y =piratesSweight [piratesSex == "male"],
+
+         pch = 16,
+
+         col =transparent("coral2", trans.val = .80)
Error: object 'pirates' not found
+         y= piratesSweight [piratesSex == "female"],
Error: unexpected ',' in "         yw piratesSweight [piratesSex == 'female"] ,"
>
```

Values

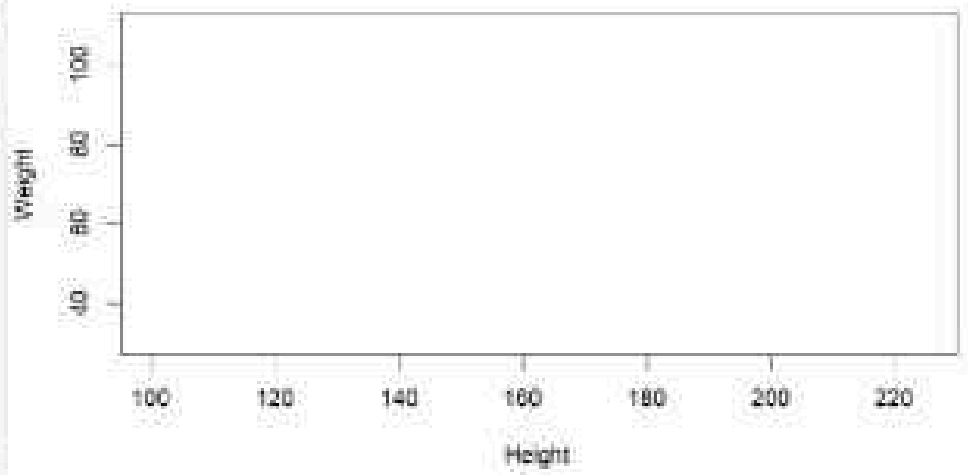
age	30
name	"John Doe"
num1	5
num2	10
text	"awesome"
text1	"R is"
text2	"awesome"
var1	"orange"
var2	"banana"



```
      ylab ="Weight",
      main = "Adding points to a plot with points()"
points (x = piratesHeight [piratesSex == "male"],
        y =piratesWeight [piratesSex == "male"],
        pch = 16,
        col =transparent("coral2", trans.val = .8))
points (x = piratesHeight [piratesSex == "female"],
        y= piratesWeight [piratesSex == "female"],
        pch= 16,
        col= transparent("orchid3", trans.val
```

```
+      ylab ="Weight",
+
+      main = "Adding points to a plot with points()"
+ points (x = piratesHeight [piratesSex == "male"],
+
+         y =piratesWeight [piratesSex == "male"],
+
+         pch = 16,
+
+         col =transparent("coral2", trans.val = .8))
Error: object 'piratesS' not found
+         y= piratesWeight [piratesSex == "female"],
Error: unexpected ',' in "         y= piratesWeight [piratesSex == "female"),"
>
```

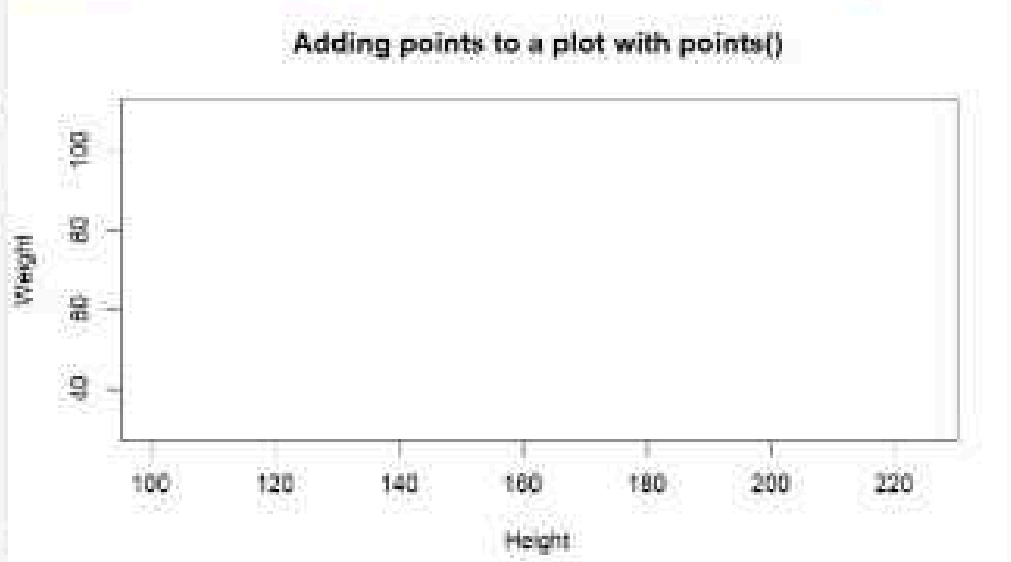
Values	
age	40
name	"John Doe"
num1	5
num2	10
text	"awesome"
text1	"R is"
text2	"awesome"
var1	"orange"
var2	"orchid"



```
# Create a blank plot
plot(x = 1,
     type = "n",
     xlim = c(100, 220),
     ylim = c(40, 110),
     pch = 16,
     xlab = "Height",
     ylab = "Weight",
     main = "Adding points to a plot with points()")

# Add coral2 points for male data
points(x = piratesHeight[piratesSex == "Male"],
       y = piratesWeight[piratesSex == "Male"],
       pch = 16,
       col = transparent("coral2", trans.val = .8))

# Add steelblue points for female data
points(x = piratesHeight[piratesSex == "Female"],
       y = piratesWeight[piratesSex == "Female"],
       pch = 16,
       col = transparent("steelblue3", trans.val = .8))
plot(x = ultraviolet)
```

```
Error: object 'pirates' not found
> # Add steelblue points for female data
> points(x = piratesHeight[piratesSex == 'Female']
+        y = piratesWeight[piratesSex == 'Female'],
+        pch = 16,
+        col = transparent('steelblue3', trans.val = .8))
Error: object 'pirates' not found
> # Add vertical line at mean weight
> abline(v = mean(piratesSweight),
+        lty = 2)                          # Dashed line
Error: object 'pirates' not found
> # Add vertical line at mean weight
> abline(v = mean(piratesSweight),
+        lty = 2)                          # Dashed line
Error: object 'pirates' not found
>
```

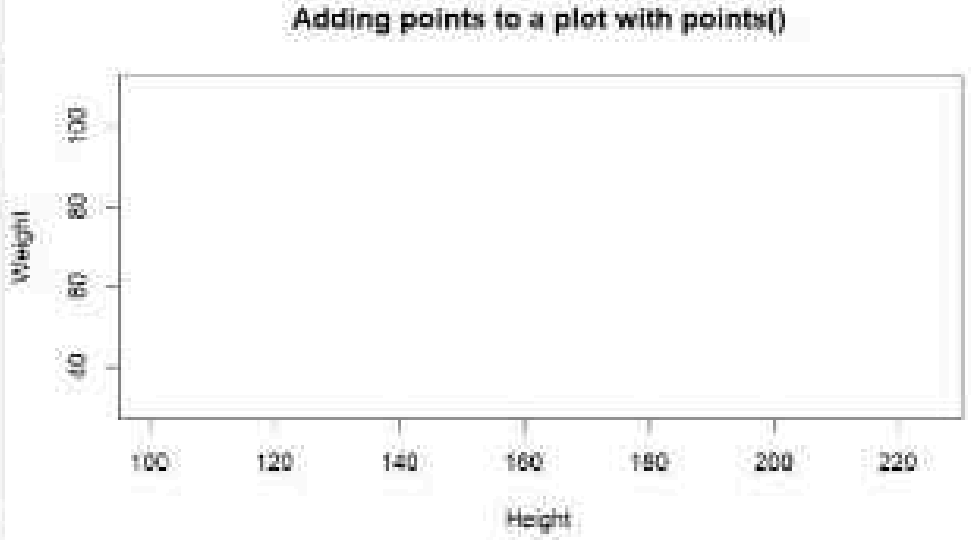
Values	
age	40
name	"John Doe"
num1	5
num2	10
text	"awesome"
text1	"R is"
text2	"awesome"
var1	"orange"
var2	"orchid"

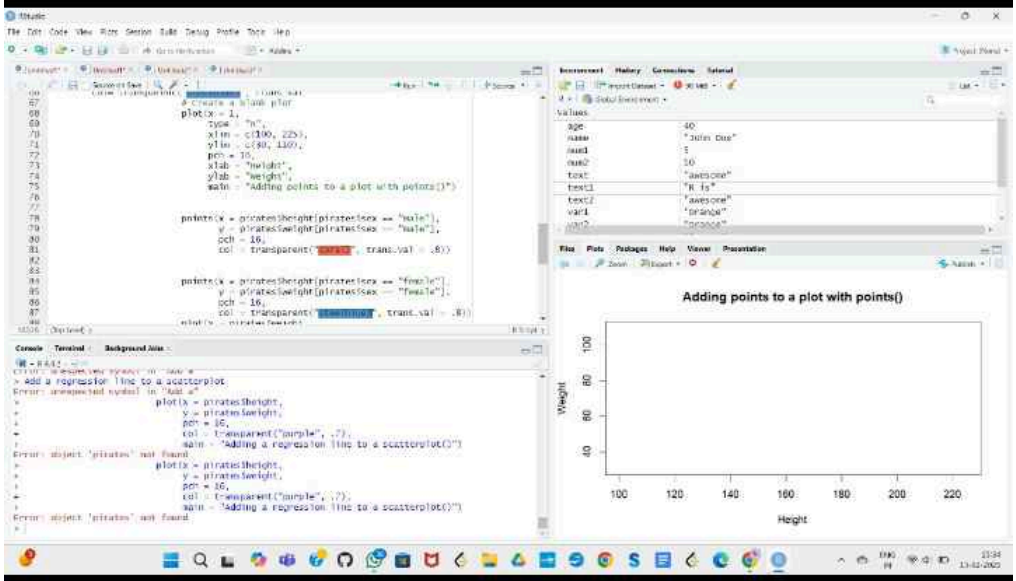


```
# Add steelblue points for female data
points(x = pirates$weight[pirates$sex == "female"],
       y = pirates$height[pirates$sex == "female"],
       pch = 16,
       col = transparent("steelblue", trans.val = .8))
plot(x = pirates$weight,
     y = pirates$height,
     xlab = "Weight",
     ylab = "Height",
     main = "Adding points to a plot with points()",
     pch = 16,
     col = gray(.5, .2))

# Add horizontal line at mean height
abline(h = mean(pirates$height),
       lty = 2)                          # Dashed line

# Add vertical line at mean weight
abline(v = mean(pirates$weight),
       lty = 2)                          # Dashed line
```

```
> # Add steelblue points for female data
> points(x = pirates$weight[pirates$sex == "female"],
+        y = pirates$height[pirates$sex == "female"],
+        pch = 16,
+        col = transparent("steelblue", trans.val = .8))
Error: object 'pirates' not found
> # Add vertical line at mean weight
> abline(v = mean(pirates$weight),
+        lty = 2)                          # Dashed line
Error: object 'pirates' not found
> # Add vertical line at mean weight
> abline(v = mean(pirates$weight),
+        lty = 2)                          # Dashed line
Error: object 'pirates' not found
>
```

Values	
age	40
name	"John Doe"
num1	5
num2	10
text	"awesome"
text1	"R is"
text2	"awesome"
var1	"orange"
var2	"orange"



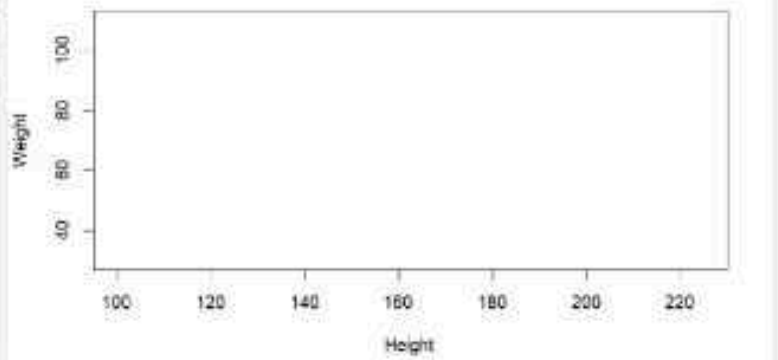

Adding points to a plot with points()
Weight
Height
100
120
140
160
180
200
220
40
60
80
100

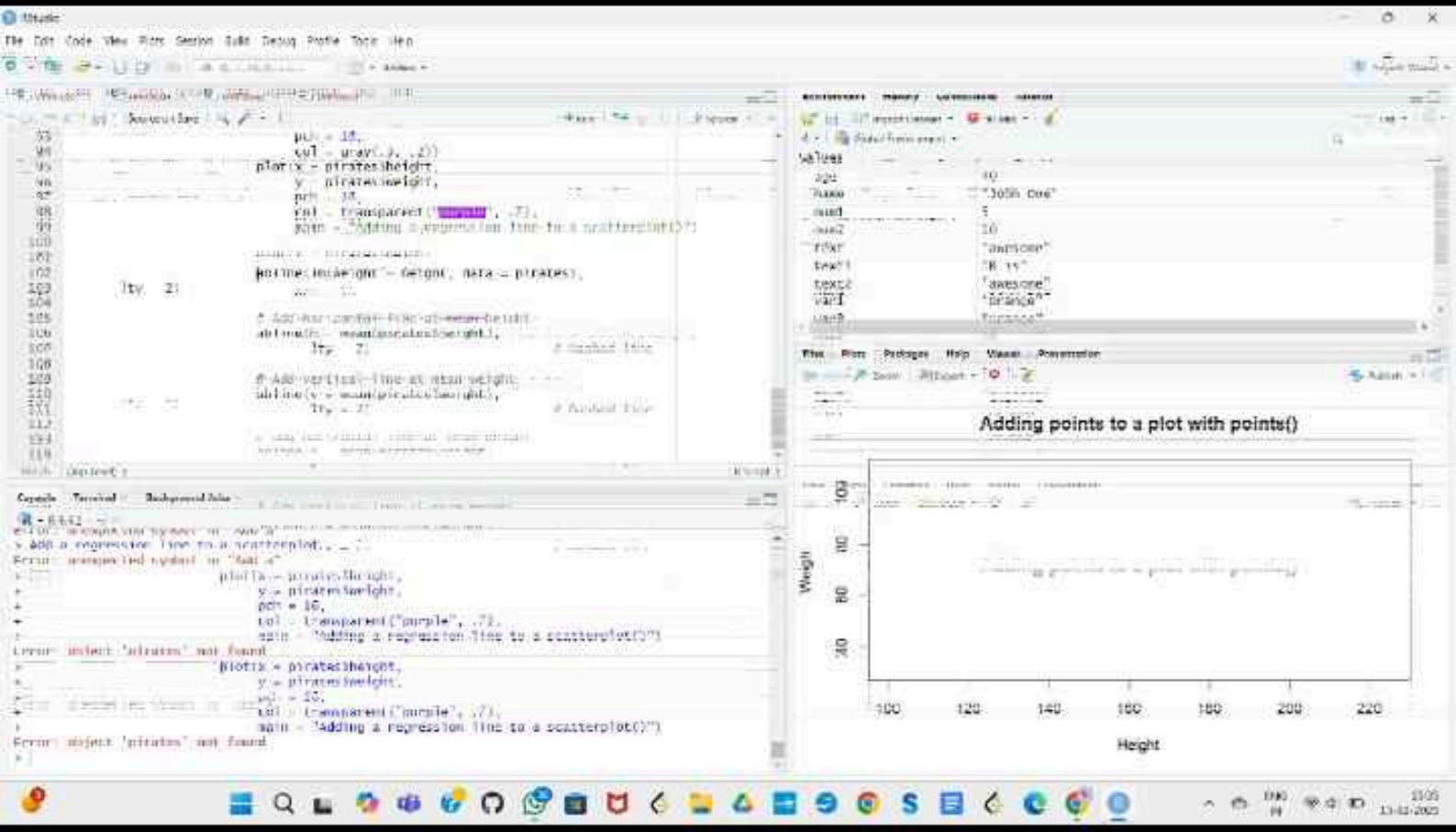
Reply

```
                    points(x = piratesHeight[piratesSex == "Female"],
                           y = piratesWeight[piratesSex == "Female"],
                           pch = 16,
                           col = transparent("[redacted]", trans.val = .8))
                    plot(x = piratesWeight,
                         y = piratesHeight,
                         xlab = "Weight",
                         ylab = "Height",
                         main = "Adding reference lines with abline",
                         pch = 16,
                         col = gray(.5, .2))
                    plot(x = piratesHeight,
                         y = piratesWeight,
                         pch = 16,
                         col = transparent("purple", .7),
                         main = "Adding a regression line to a scatterplot()")


                    abline(lm(weight ~ height, data = pirates),
       lty = 2)

                    # Add horizontal line at mean height
```

```
> Add a regression line to a scatterplot
Error: unexpected symbol in "Add a"
>                     plot(x = piratesHeight,
+                          y = piratesWeight,
+                          pch = 16,
+                          col = transparent("purple", .7),
+                          main = "Adding a regression line to a scatterplot()")
Error: object 'pirates' not found
>                     plot(x = piratesHeight,
+                          y = piratesWeight,
+                          pch = 16,
+                          col = transparent("purple", .7),
+                          main = "Adding a regression line to a scatterplot()")
Error: object 'pirates' not found
>
```

Values	
age	40
name	"John Doe"
num1	5
num2	10
text	"awesome"
text1	"R is"
text2	"awesome"
var1	"orange"
var2	"[redacted]"



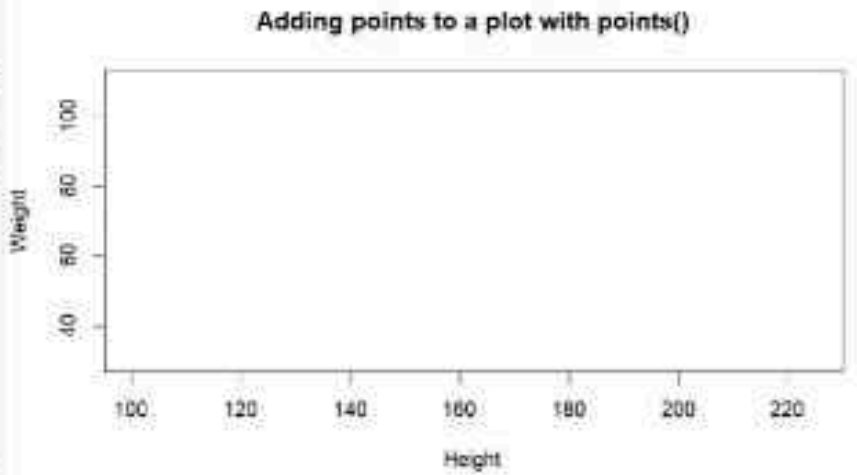

Adding points to a plot with points()
Weight
Height
100
120
140
160
180
200
220
30
60
90
> Add a regression line to a scatterplot(...)
Error: unexpected symbol in "Add a"
Error: object 'pirates' not found
Error: object 'pirates' not found

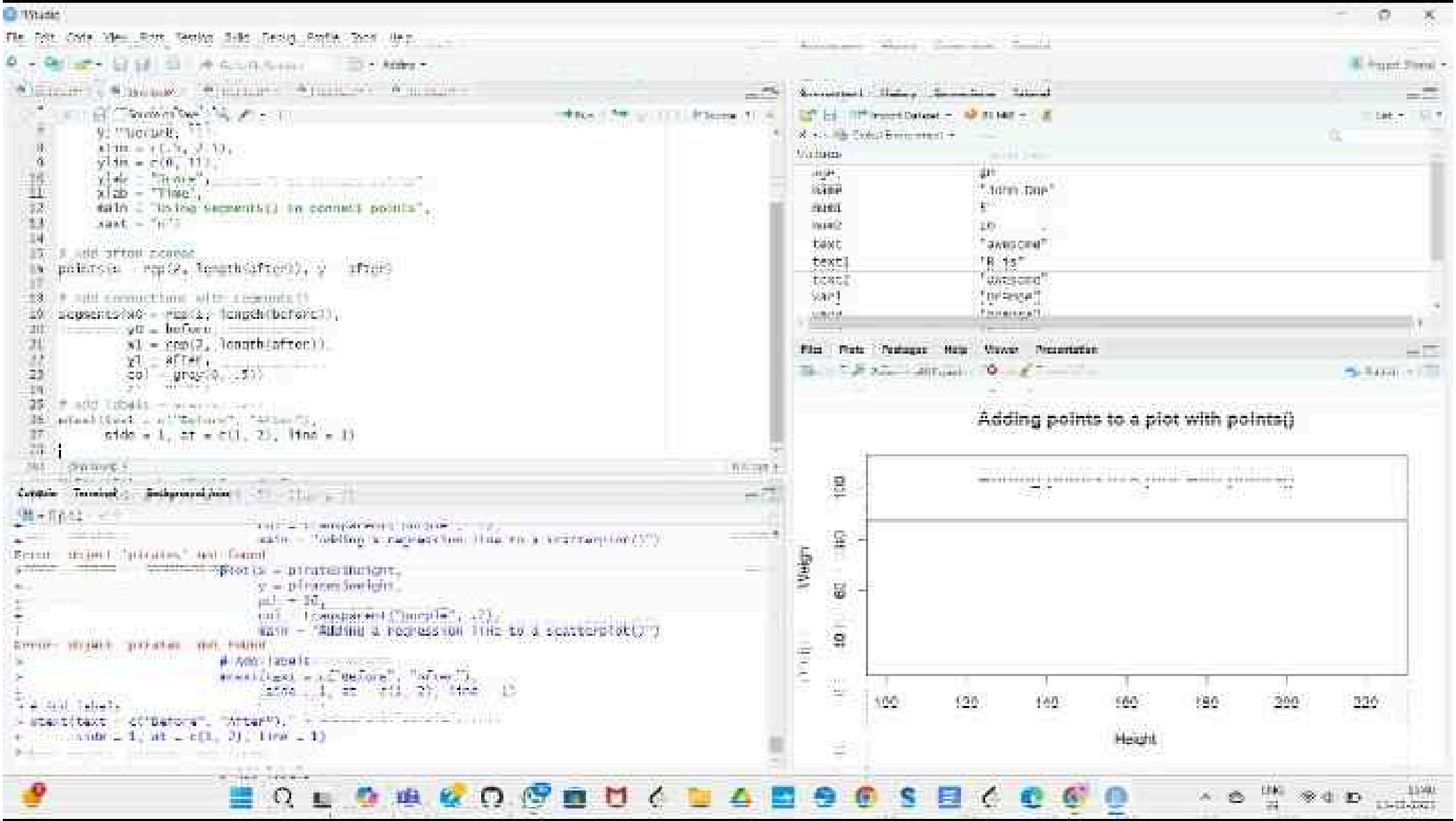
```
# Before and after data
before <- c(2.1, 3.5, 1.8, 4.2, 2.4, 3.9, 2.1, 4.4)
after  <- c(7.5, 5.1, 8.9, 5.6, 7.5, 5.2, 6.1, 7.3)

# Create plotting space and before scores
plot(x = rep(1, length(before)),
     y = before,
     xlim = c(.5, 2.5),
     ylim = c(0, 11),
     ylab = "Score",
     xlab = "Time",
     main = "Using segments() to connect points",
     axes = "n")

# Add after scores
points(x = rep(2, length(after)), y = after)

# Add connections with segments()
segments(x0 = rep(1, length(before)),
         y0 = before,
         x1 = rep(2, length(after)),
         y1 = after,
```

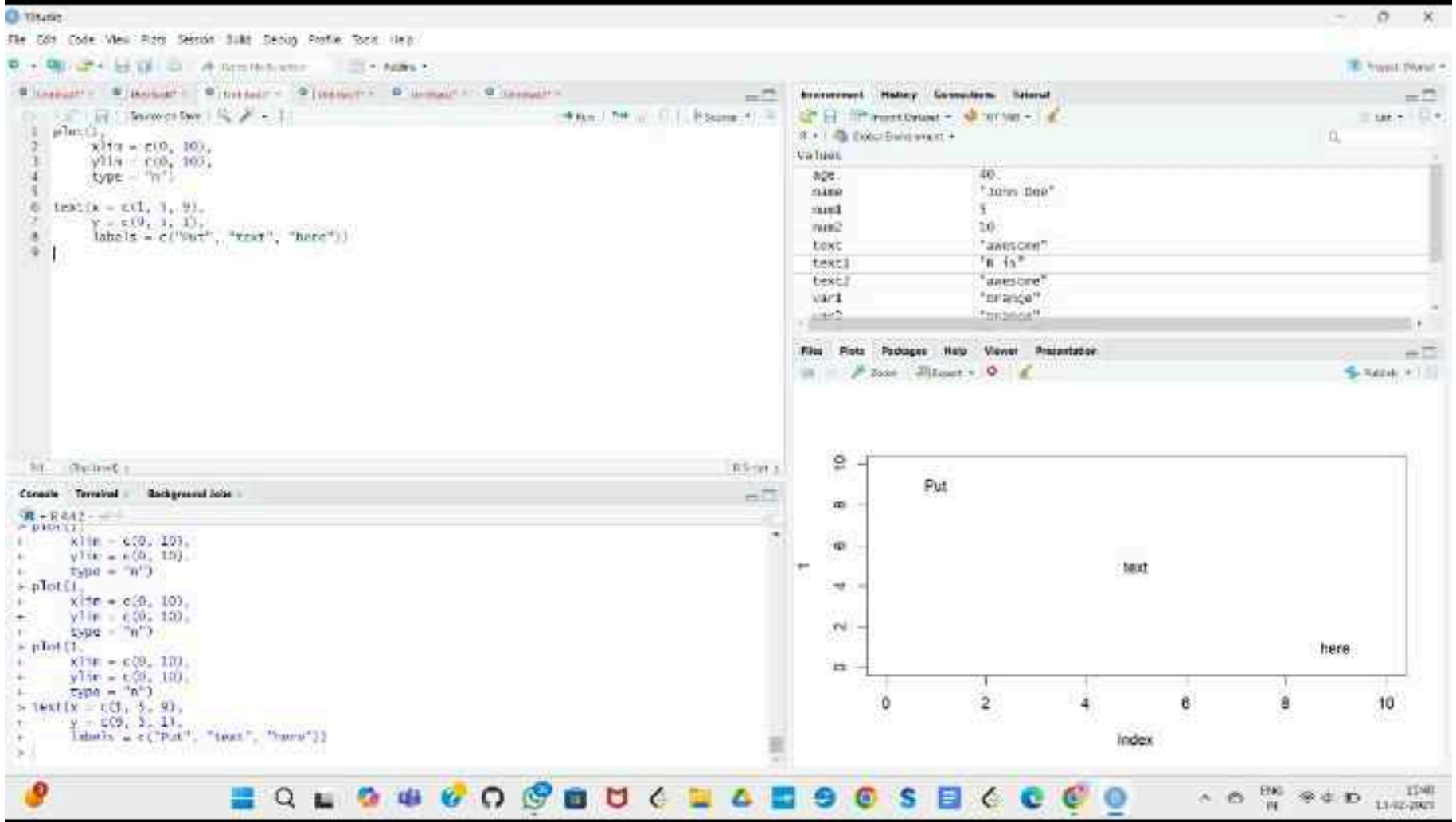
```
> # Before and after data
> before <- c(2.1, 3.5, 1.8, 4.2, 2.4, 3.9, 2.1, 4.4)
> after  <- c(7.5, 5.1, 8.9, 5.6, 7.5, 5.2, 6.1, 7.3)
>
> # Create plotting space and before scores
> plot(x = rep(1, length(before)),
+      y = before,
+      xlim = c(.5, 2.5),
+      ylim = c(0, 11),
+      ylab = "Score",
+      xlab = "Time",
+      main = "Using segments() to connect points",
+      axes = "n")
>
> # Add after scores
> points(x = rep(2, length(after)), y = after)
>
> # Add connections with segments()
> segments(x0 = rep(1, length(before)),
+          y0 = before,
+          x1 = rep(2, length(after)),
+          y1 = after,
+          col = rgb(0, 0, 0, .2),
+          lwd = 3)
>
> # Add labels
> mtext(text = c("Before", "After"),
+       side = 1, at = c(1, 2), line = 1)
>
```

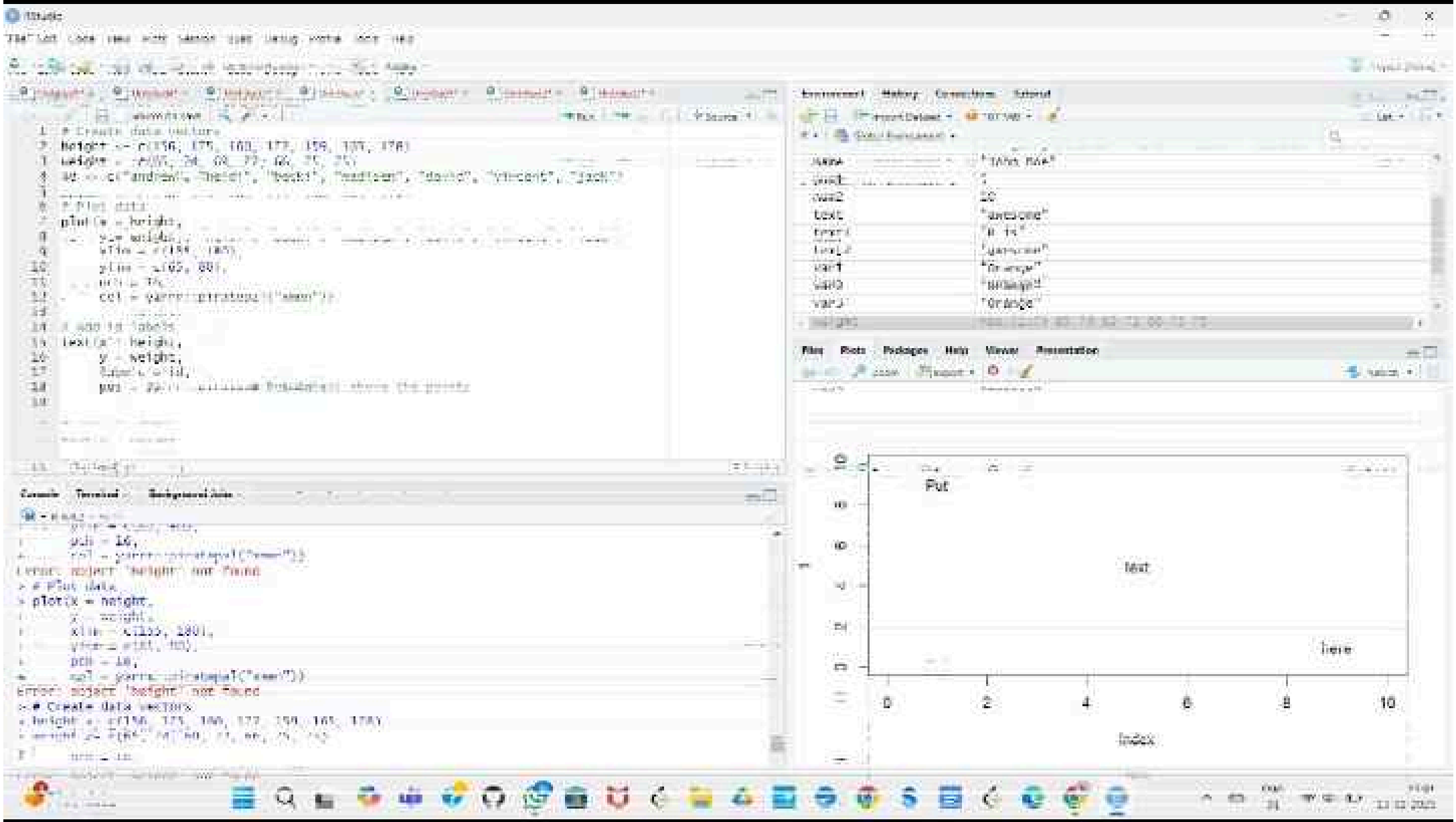
```
+                          main = "Adding a regression line to a scatterplot()")
Error: object 'pirates' not found
> plot(x = pirates$height,
+      y = pirates$weight,
+      pch = 16,
+      col = rgb(purple", .7),
+      main = "Adding a regression line to a scatterplot()")
Error: object 'piruten' not found
> # Add labels
> mtext(text = c("Before", "After"),
+       side = 1, at = c(1, 2), line = 1)
>
> # Add labels
> mtext(text = c("Before", "After"),
+       side = 1, at = c(1, 2), line = 1)
>
```

Values	
age	40
name	"John Doe"
num1	5
num2	10
text	"awesome"
text1	"R is"
text2	"awesome"
var1	"orange"
var2	"orange"




Adding points to a plot with points()
Weight
Height
100
120
140
160
180
200
220

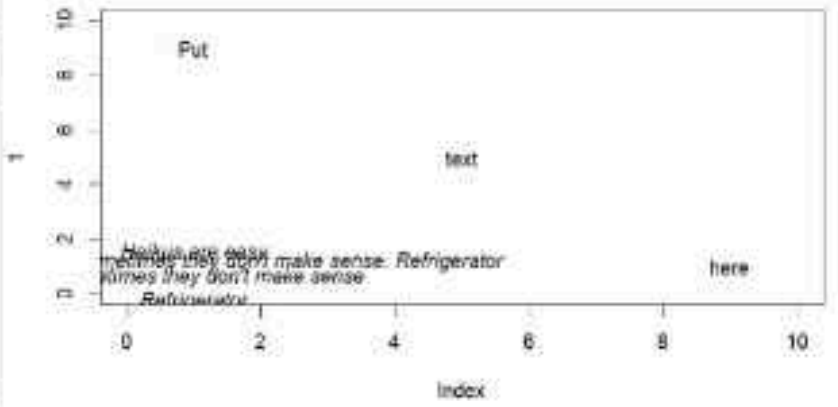

RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
plot()
xlim = c(0, 10),
ylim = c(0, 10),
type = "n")
text(x = c(1, 5, 9),
y = c(9, 5, 1),
labels = c("Put", "text", "here"))
Console Terminal Background Jobs
Values
age 40
name "John Doe"
num1 5
num2 10
text "awesome"
text1 "R is"
text2 "awesome"
var1 "orange"
Plots Packages Help Viewer Presentation
Put
text
here
Index


Put
text
here
0
2
4
6
8
10
Index

```
plot(1,
     type = 'n',
     main = "the \\n tag",
     xlab = "", ylab = "")

# Text without breaks
text(x = 1, y = 1.4, labels = "text without \\n", font = 2)
text(x = 1, y = 1.2,
     labels = "Haikus are easy. But sometimes they don't make sense. Refrigerator",
     font = 3) # italic font

plot(1, ty = 2)
# text with breaks
text(x = 1, y = .97, labels = "text with \\n", font = 2)
text(x = 1, y = .7,
     labels = "Haikus are easy\nBut sometimes they don't make sense\nRefrigerator",
     font = 3)   # italic font
```

```
> # Create data vectors
> height <- c(150, 175, 180, 172, 159, 161, 178)
> weight <- c(65, 74, 80, 72, 68, 75, 74)
> text(x = 1, y = .7,
+      labels = "Haikus are easy\nBut sometimes they don't make sense\nRefrigerator",
+      font = 3)   # italic font
> text(x = 1, y = 1.2,
+      labels = "Haikus are easy. But sometimes they don't make sense. Refrigerator",
+      font = 3) # italic font
```

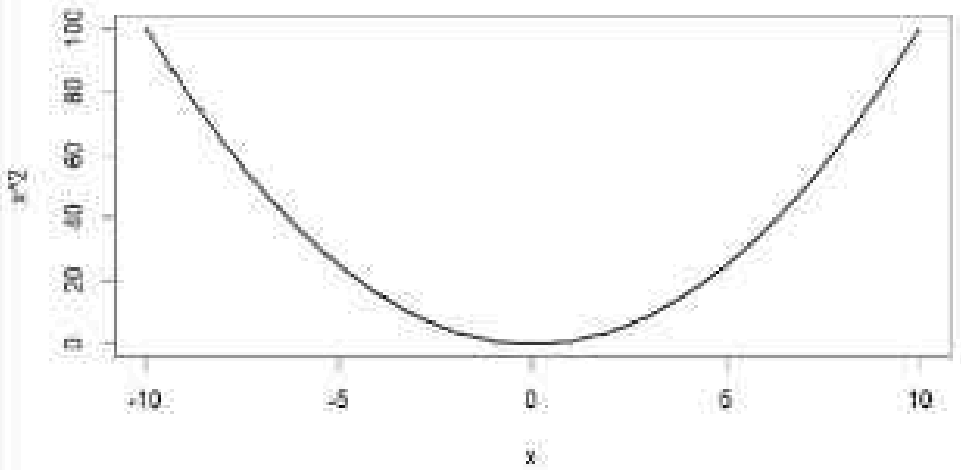
name	"John Doe"
num1	5
num2	10
text	"awesome"
text1	"R is"
text2	"awesome"
var1	"Orange"
var2	"Orange"
var3	"Orange"

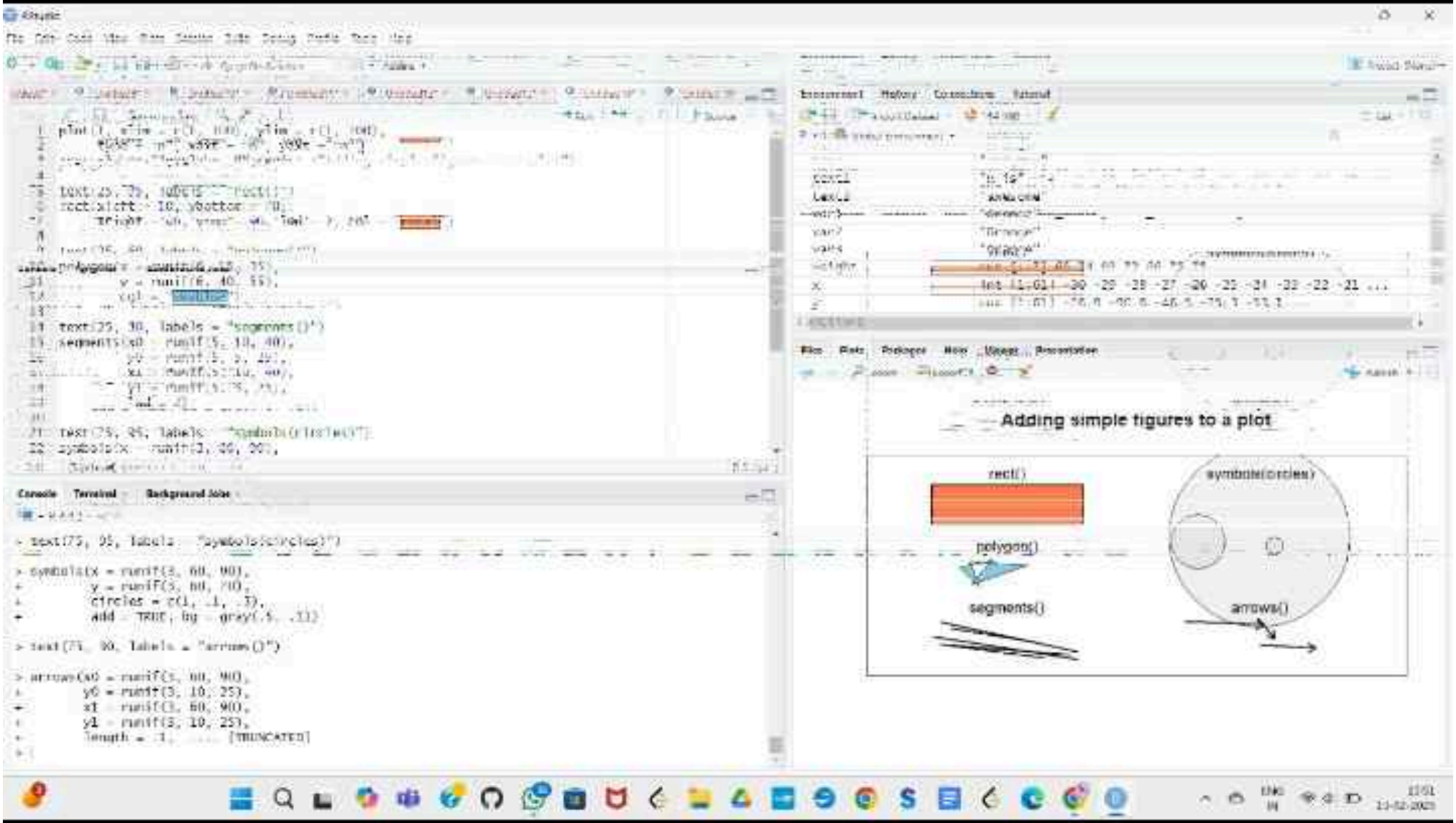


```
# Plot the function x^2 from -10 to +10
curve(expr = x^2,
      from = -10,
      to = 10, lwd = 2)
```

```
      pch = 19)
# Add reference line
abline(h = mean(ChickWeight$weight),
       lty = 2)
# Create the plot
plot(x = ChickWeight$Time,
     y = ChickWeight$weight,
     col = gray(.3, .5),
     pch = 16,
     main = "Combining text with numeric scalars using paste()")
# Plot the function x^2 from -10 to +10
curve(expr = x^2,
      from = -20,
      to = 10, lwd = 2)
```

name	"John Doe"
num1	5
num2	10
text	"awesome"
text1	"R is"
text2	"awesome"
var1	"orange"
var2	"orange"
var3	"orange"




Adding simple figures to a plot
rect()
polygon()
segments()
symbols(circles)
arrows()