3

# Create an empty data frame

inventory\_data <- data.frame(

Item = character(),

Quantity = numeric()

)

# Add an item to the inventory

add\_item <- function(item, quantity) {

inventory\_data <<- rbind(inventory\_data, data.frame(

Item = item,

Quantity = quantity

))

cat("Item added to inventory.\n")

}

# Update the quantity of an item

update\_quantity <- function(item, new\_quantity) {

if (item %in% inventory\_data$Item) {

inventory\_data$Quantity[inventory\_data$Item == item] <<- new\_quantity

cat("Quantity updated.\n")

} else {

cat("Item not found in inventory.\n")

}

}

# Display the inventory

display\_inventory <- function() {

cat("Inventory Items and Quantities:\n")

print(inventory\_data)

}

# User interface

repeat {

choice <- as.integer(readline("\n1. Add Item\n2. Update Quantity\n3. Display Inventory\n4. Exit\n"))

if (choice == 1) {

item <- readline("Enter item name: ")

quantity <- as.numeric(readline("Enter quantity: "))

add\_item(item, quantity)

} else if (choice == 2) {

item <- readline("Enter item name: ")

new\_quantity <- as.numeric(readline("Enter new quantity: "))

update\_quantity(item, new\_quantity)

} else if (choice == 3) {

display\_inventory()

} else if (choice == 4) {

cat("Goodbye!\n")

break

} else {

cat("Invalid choice.\n")

}

}