

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")  
}  
}
```