

4

```
# Load necessary package
```

```
library(dplyr)
```

```
# Create an empty data frame
```

```
student_data <- data.frame(
```

```
  Name = character(),
```

```
  Math_Score = numeric(),
```

```
  Science_Score = numeric(),
```

```
  History_Score = numeric(),
```

```
  Attendance = numeric())
```

```
# Add a student
```

```
add_student <- function(name, math, science, history,  
attendance) {
```

```
  student_data <- rbind(student_data, data.frame(
```

```
    Name = name,
```

```
    Math_Score = math,
```

```
    Science_Score = science,
```

```
    History_Score = history,
```

```
    Attendance = attendance
```

```
  ))
```

```
}
```

```
generate_report <- function() {
```

```
  # Calculate average scores
```

```
student_data$Average_Score <- (student_data$Math_Score  
+ student_data$Science_Score +  
student_data$History_Score) / 3
```

```
# Create attendance labels
```

```
student_data$Attendance_Label <-  
ifelse(student_data$Attendance < 70, "NE",  
student_data$Attendance)
```

```
# Select relevant columns for the report
```

```
report <- student_data[c("Name", "Average_Score",  
"Attendance_Label")]
```

```
# Print the report
```

```
print(report)  
}
```

```
# User interface
```

```
repeat {
```

```
  choice <- as.integer(readline("\n1. Add Student\n2.  
Generate Report\n3. Exit\n"))
```

```
  if (choice == 1) {
```

```
    name <- readline("Name: ")
```

```
    math <- as.numeric(readline("Math Score: "))
```

```
    science <- as.numeric(readline("Science Score: "))
```

```
    history <- as.numeric(readline("History Score: "))
    attendance <- as.numeric(readline("Attendance: "))
    add_student(name, math, science, history, attendance)
  } else if (choice == 2) {
    generate_report()
  } else if (choice == 3) {
    cat("Goodbye!\n")
    break
  } else {
    cat("Invalid choice.\n")
  }
}
```