

2

```
# Number of students and courses
```

```
num_students <- 5
```

```
num_courses <- 5
```

```
# Student names
```

```
student_names <- c("Arun Rahul", "Bheem Kumar", "Raj  
Kumar", "Jahal A R", "Suresh")
```

```
# Matrix of course marks
```

```
course_marks <- matrix(c(
```

```
  85, 92, 78, 88, 95,
```

```
  75, 80, 85, 70, 60,
```

```
  100, 78, 56, 34, 56,
```

```
  78, 45, 67, 89, 90,
```

```
  89, 80, 67, 78, 90
```

```
), nrow = 5)
```

```
# Create a data frame to store student records
```

```
student_records <- data.frame(
```

```
  Name = student_names,
```

```
  Total_Marks = rowSums(course_marks),
```

```
  Average_Marks = rowMeans(course_marks)
```

```
)
```

```
# Add grades based on average marks
```

```
student_records$Grade <- ifelse(  
  student_records$Average_Marks >= 90, "A",  
  ifelse(student_records$Average_Marks >= 80, "B",  
    ifelse(student_records$Average_Marks >= 70, "C",  
      ifelse(student_records$Average_Marks >= 60,  
        "D", "F"))))  
)
```

```
# Print student grade report  
cat("\nStudent Grade Report:\n")  
print(student_records)
```