

```
#1.
NumVector <- seq(0,50,2)
NumVector
Sum <- sum(NumVector)

#2.
EmployeeID <- c(101, 102, 103, 104, 105)
Name <- c("Alice", "Bob", "Charlie", "Diana", "Eve")
Department <- c("HR", "IT", "Finance", "Marketing", "IT")
Salary <- c(50000, 60000, 70000, 55000, 65000)
tax <- Salary * .1
Employee_DF <- data.frame(EmployeeID, Name, Department, Salary, tax)
Employee_DF
IT_Employee <- subset(Employee_DF, Department == "IT")
IT_Employee

#3.
get_unique_values <- function(data, column_name){
  if(column_name %in% colnames(data)){
    unique(data[[column_name]])
  }
  else {
    print("COLUMN DOES NOT EXIST!!")
  }
}
unique_departments <- get_unique_values(Employee_DF, "Department")
unique_departments

#4.
check_salary <- function(data, employee_name){
  employee_info <- subset(data, Name == employee_name)
  employee_salary <- employee_info$Salary
  if(nrow(employee_info) == 0){
    print("EMPLOYEE DOES NOT EXIST!!")
  }
  else {
    if(employee_salary > 70000){
      print("High Salary Detected")
    }
    else {
      print("All Salaries are Within Range")
    }
  }
}
check_salary(Employee_DF, "Chris")

#5.
Employee_DF
Employee_DF$Salary[3] <- NA
total_salary1 <- sum(Employee_DF$Salary)
total_salary1 #adding NA along double will result to an NA too
# this is because R does not know how to handle NA

total_salary2 <- sum(Employee_DF$Salary, na.rm = TRUE)
total_salary2 #excluding NA will give R a normal process of adding the
salaries
```