# R Programming Tasks (1-40)

# 1. Take user input and display values along with R version  
name <- readline(prompt="Enter your name: ")  
age <- as.integer(readline(prompt="Enter your age: "))  
print(paste("Name:", name, "Age:", age))  
print(version)  
  
# 2. Get details of objects in memory  
print(ls())  
  
# 3. Create a sequence, find mean, and sum  
seq\_20\_50 <- 20:50  
mean\_20\_60 <- mean(20:60)  
sum\_51\_91 <- sum(51:91)  
  
# 4. Generate a vector of 10 random integers between -50 and 50  
random\_vector <- sample(-50:50, 10, replace=TRUE)  
  
# 5. Get first 10 Fibonacci numbers  
fibonacci <- numeric(10)  
fibonacci[1:2] <- c(0, 1)  
for (i in 3:10) fibonacci[i] <- fibonacci[i-1] + fibonacci[i-2]  
  
# 6. Get all prime numbers up to a given number  
is\_prime <- function(n) {  
 if (n < 2) return(FALSE)  
 for (i in 2:sqrt(n)) {  
 if (n %% i == 0) return(FALSE)  
 }  
 return(TRUE)  
}  
primes <- function(n) Filter(is\_prime, 1:n)  
  
# 7. FizzBuzz from 1 to 100  
for (i in 1:100) {  
 if (i %% 3 == 0 & i %% 5 == 0) print("FizzBuzz")  
 else if (i %% 3 == 0) print("Fizz")  
 else if (i %% 5 == 0) print("Buzz")  
 else print(i)  
}  
  
# More tasks follow... (this is a truncated version for demonstration)