ICS321 DATA WAREHOUSING AND DATA MINING

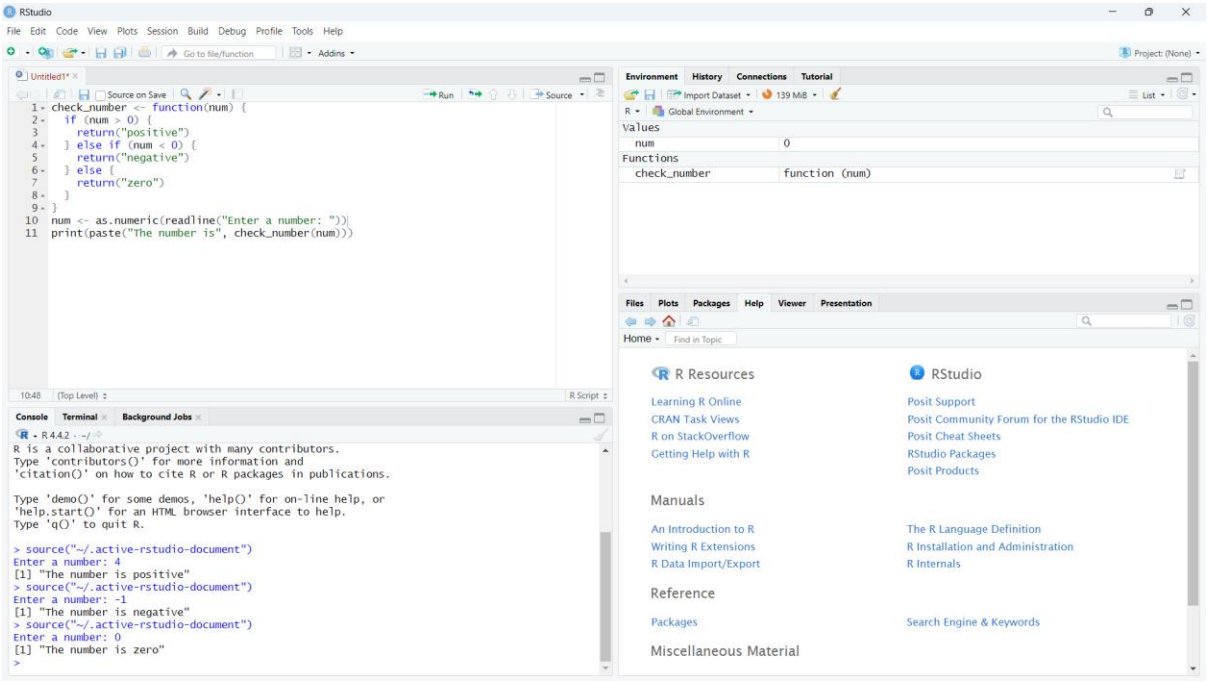
LAB 2 SUBMISSION -16/01/25

Name: Manohar Reddy Pulicharla,

Roll. No: 2022BCD0027.

1) Write a function that takes an integer as input and returns whether the number is **positive**, **negative**, or **zero**.

OUTPUT:

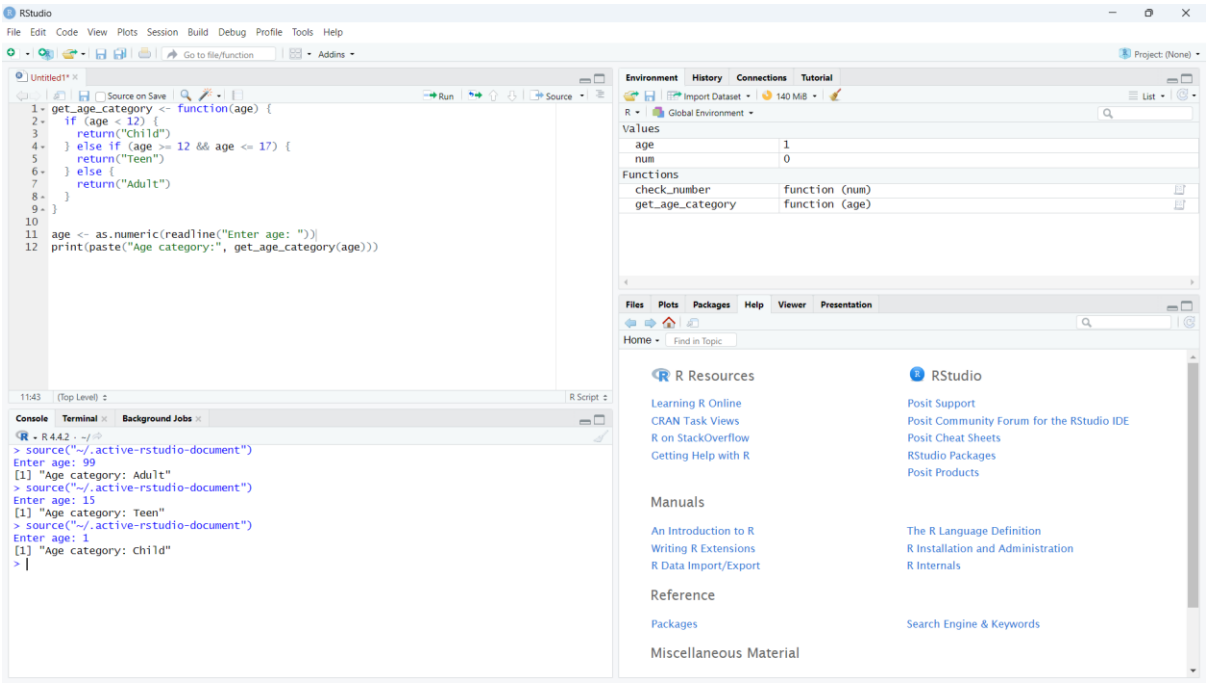


2) Write a function that checks the age of a person and returns the age category:

- **"Child"** if the age is less than 12,

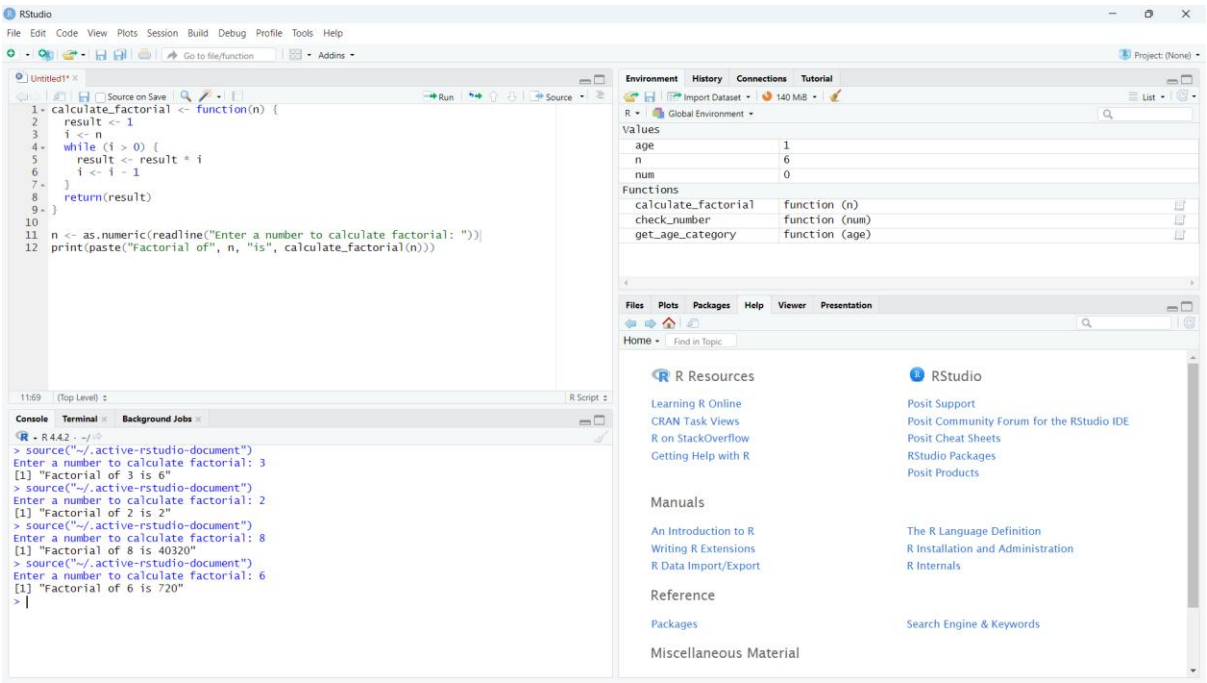
- **"Teen"** if the age is between 12 and 17 (inclusive),
- **"Adult"** if the age is 18 or older.

OUTPUT:



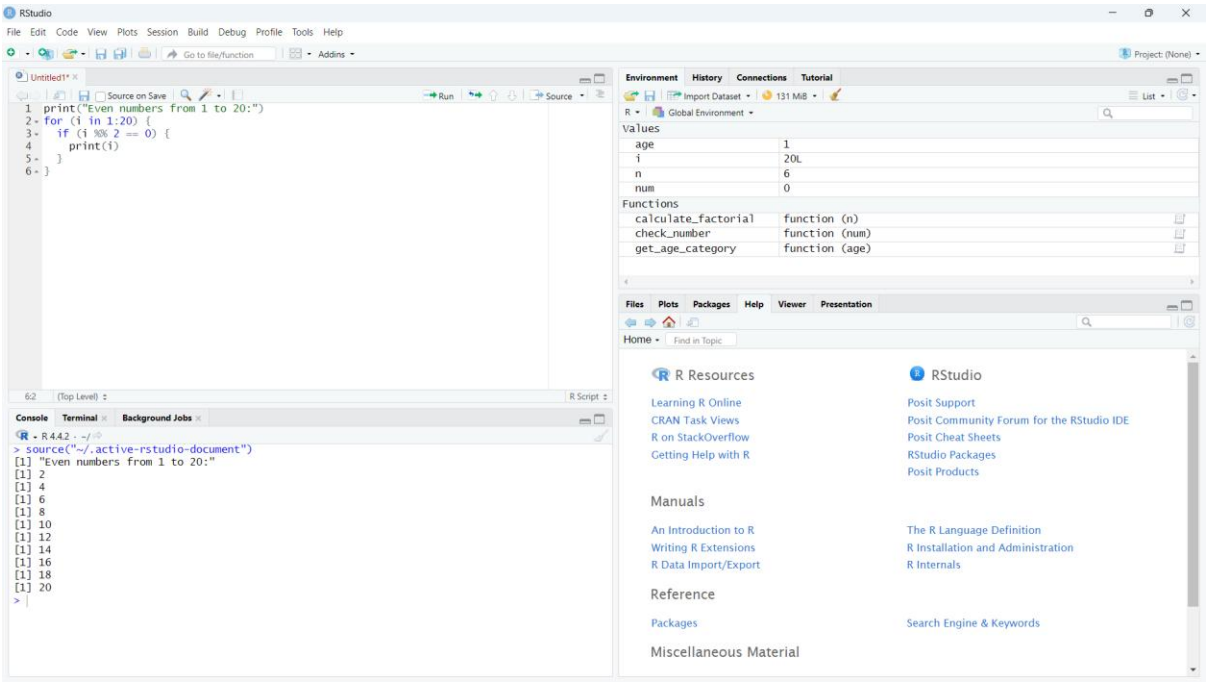
3) Write a while loop to calculate the factorial of a given number n (e.g., 5! = 5 * 4 * 3 * 2 * 1).

OUTPUT:



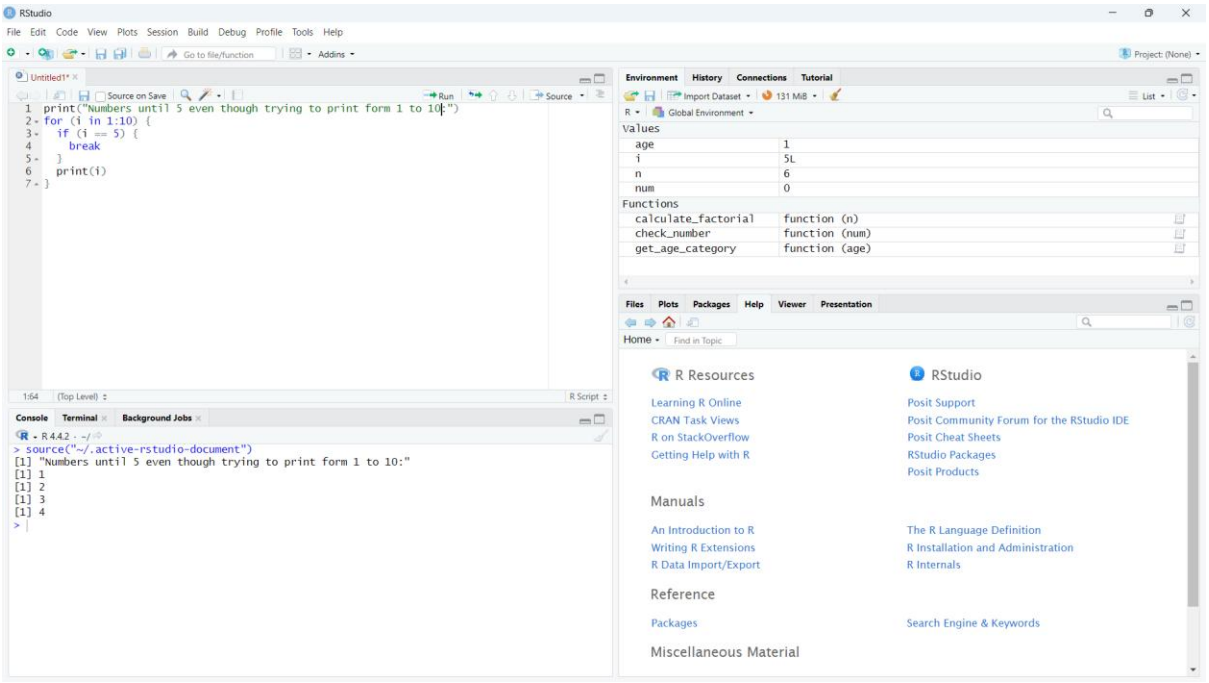
4) Write a for loop that prints all the even numbers from 1 to 20.

OUTPUT:



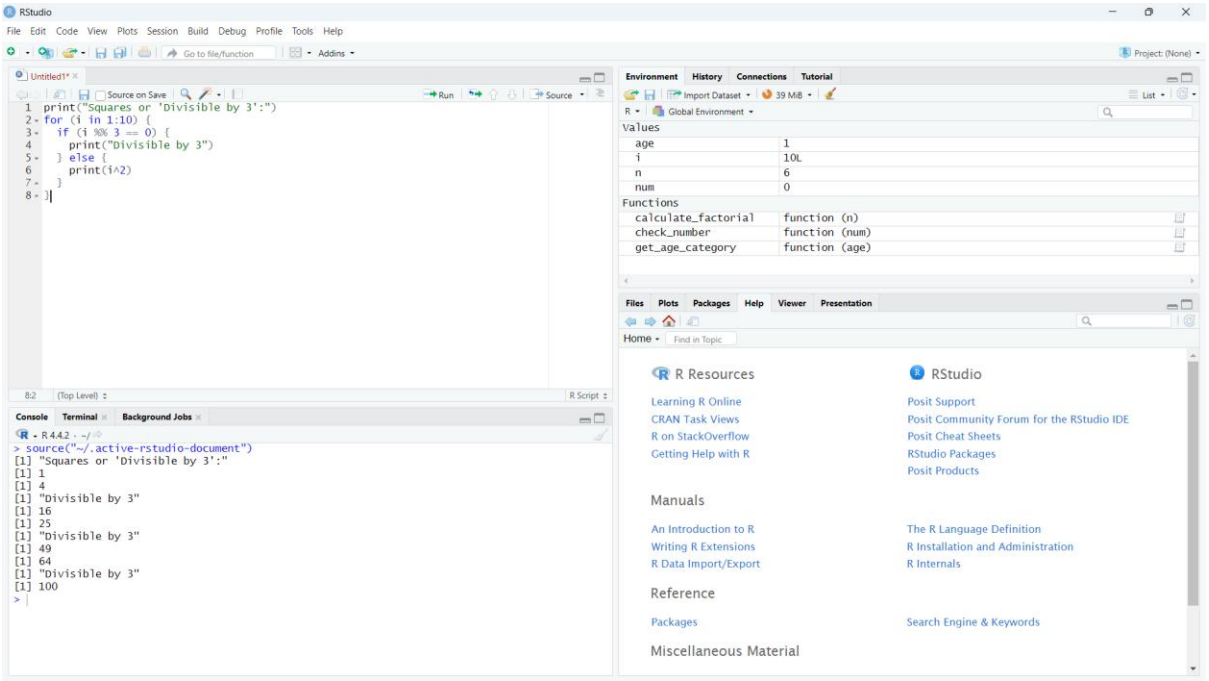
5) Write a for loop to print numbers from 1 to 10, but stop (using break) when the number 5 is reached.

OUTPUT:



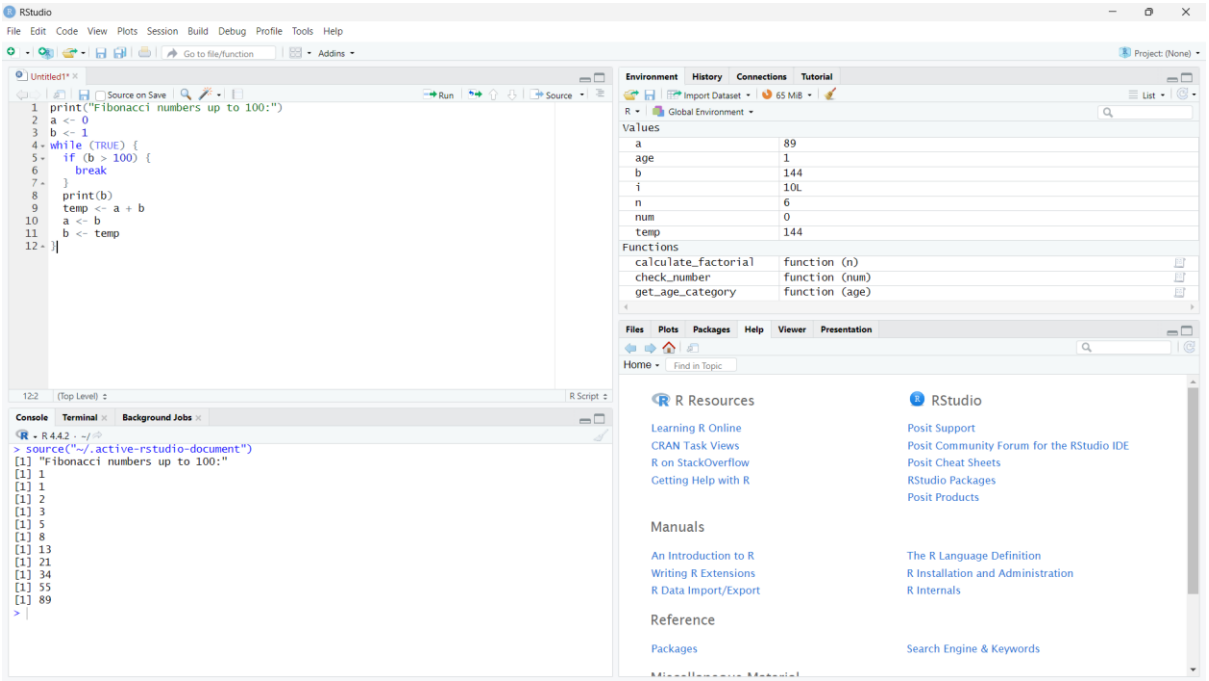
6) Write a for loop that calculates and prints the squares of numbers from 1 to 10. However, for numbers that are divisible by 3, print "Divisible by 3" instead of the square.

OUTPUT:



7) Write a while loop that generates Fibonacci numbers and stops (using break) when a Fibonacci number exceeds 100.

OUTPUT:



8) Write a for loop inside a while loop to print numbers from 1 to 10. If the current number is divisible by 4, use break to exit the for loop and print a message. Then, continue with the while loop.

OUTPUT: