

## Practice Sheet 1

To take user input in R:

Format:

**Var name= as.dataType(readline("Prompt for input"))**

E.g.: x= as.integer(readline("Enter a number"))

To find remainder of two numbers:

Format:

**a %% b** is used

1. Write a R program to take input from the user (name and age) and display the values.
2. Write a R program to take year as input from user and check if it is leap year or not (A leap year is exactly divisible by 4 except for century years (years ending with 00). The century year is a leap year only if it is perfectly divisible by 400.)
3. Write a R program to create three vectors numeric data, character data and logical data. Display the content of the vectors and their type.
4. Write a R program to input a number from user and check if it is a 3-digit number. If it is a 3-digit number check if it is an Armstrong number or not. (For example, 371 is an **Armstrong** number since  $3^3 + 7^3 + 1^3 = 371$ ).
5. Create 2 vectors x and y of length 3 and integer data type. Try various mathematical operations on it. What happens if length of x and y is different? Experiment and find out.